

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE

BOROUGH OF CREWE.

BY

ANDREW J. LAIRD, M.D., D.P.H. (Camb.),

Medical Officer of Health, and

Medical Superintendent of Borough Isolation Hospitals.

1904.

CREWE:

THE CREWE STATIONERY COMPANY, LIMITED.

BOROUGH OF CREWE.

HEALTH COMMITTEE,

1903—1904.

Chairman—

HIS WORSHIP THE MAYOR

(COUNCILLOR HENRY TAYLOR).

Members—

ALDERMAN W. McNEILL.

ALDERMAN P. SWINTON.

„ R. PEDLEY.

„ G. WALLIS.

COUNCILLOR A. H. BADGER.

COUNCILLOR R. D. SHARPE.

„ H. HOPTROFF.

„ T. SMITH.

„ F. MANNING.

„ E. VAUGHAN.

„ J. ROBERTSON.

„ J. T. WORTHINGTON.

COUNCILLOR J. H. MOORE (deceased.)



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HEALTH OFFICE,

CREWE,

24th February, 1905.

To the Chairman and Members of the Health Committee.

GENTLEMEN,

I beg to present to you the Annual Report upon the Health of the Borough for the year 1904. It contains, as in former years, statistics relating to mortality and sickness, as well as an account of the sanitary condition of the town.

I am, Gentlemen,

Your obedient Servant,

Arthur L. Laird.

Medical Officer of Health.

BOROUGH OF CREWE.

Statistical Summary for 1904.

Area of Borough	...	...	...	...	...	...	...	2,185	acres.
Population of Census, 1901	...	...	...	...	...	...	...	42,074	
Estimated population to middle of 1904	...	...	...	...	...	...	...	46,065	
								1903	1904
Average number of persons per acre	...	...	...	...	...	...	...	20·8	21·08
Birth-rate per 1,000 living	...	...	...	...	...	...	...	31·9	30·9
Death-rate	...	...	...	...	...	...	...	14·3	14·6
Death-rate from zymotic diseases	...	...	...	...	...	...	...	1·6	2·04
Infant mortality, per 1,000 births	...	...	...	...	...	...	...	145	160
Total occupied houses	...	...	...	...	...	...	...	9,500	9,617
Plans of new buildings passed	...	...	...	...	...	...	...	225	157
Rateable value (General District Rate)	£140,893								£142,702
Rateable value (Borough Rate)	...	...	£149,925						£153,081
Amount raised by 1d. rate	...	...	£587	3	9			£594	11 10

Charter of Incorporation granted April 27th, 1877.

Commission of the Peace granted April 7th, 1881.

Adoptive Acts in force in Crewe.

Infectious Diseases (Prevention) Act, 1890, adopted January, 1891.

Public Health Acts Amendment Act, 1890, adopted February, 1891.

Infectious Diseases (Notification) Act, 1889, adopted October, 1896.

Geology.

The soil upon which Crewe and the neighbouring villages are built consists wholly of drift deposits. The whole of the Borough is built upon a re-deposited boulder clay (red, blue and yellow brick clays), intersected here and there with irregular lines and pockets of sand and gravel, probably the remains of old river and brook courses.

This clay deposit and an underlying bed of stratified clay lie in a hollow of stratified drift sand, and attain a depth of from 12 to 100 feet.

The drift sand rises to the surface in a bay-like curve in the outlying villages of Wistaston, Shavington, Weston, Crewe Green, and Haslington.

The whole of these deposits appear to be laid in a deep hollow in the Keuper; a brook, which passes through the centre of the Borough, appearing to have cut down to this formation.

Elevation.

The Borough is situated upon the Valley Brook, a tributary of the river Weaver. The mean elevation is about 170 feet above sea level, and varies from 113 feet at the lowest part of the Sewage Farm to 200 feet at Hightown.

HEIGHT ABOVE SEA LEVEL.

Sewage Farm (west of Queen's Park)	... ..	113 feet
The Valley	... ..	145 „
Market Square (south-west corner)	... ..	184 „
Isolation Hospital	... ..	182 „
Nantwich Road (east end)	... ..	188 „
Hightown (St. Paul's Church—north side)	... ..	200 „

Density.

The average density of the Borough is equal to 21·08 persons to the acre.

Area.

The Borough has a total of area of 2,185 acres, comprising the Civil Parish of Monks Coppenhall and parts of the Civil Parishes of Church Coppenhall, Shavington-cum-Gresty, and Wistaston, the three last named parts being added on 24th March, 1894, by Order of the Local Government Board.

Population.

In estimating the population the same method has, for the sake of uniformity, been adopted as has been used in former reports. This is based upon the number of inhabited houses as obtained from the rate-books, less the number of empty houses, and the resultant multiplied by the average number of persons per house as obtained from the last census.

Houses on Rate Books, September 30th 1904 ...	10,041
Empty Houses, Midsummer, 1904	424
Total occupied houses	9,617
Persons per house (census 1901)	4.79
Population Midsummer, 1904	46,065

This differs from the method used by the Registrar General, who estimates the population upon the assumption that the same annual rate of increase will be maintained from 1901 to the next census at 1911, as existed in the period 1891 to 1901.

Both methods are subject to error, which increases with the length of time from the last census. In the method used in these reports, the factor for multiplication (the average number per house) varies—*e.g.*, at the 1891 census it was 5.011, while at the last census in 1901 it had diminished to 4.79; but on the whole it is probably best suited to places of the size of Crewe, more especially when the population is liable to great fluctuation as the result of the condition of the labour market.

It is extremely probable that the method used has given a lower estimate of the population than is actually the case, for the reason that the proportionate increase in the number of occupied

houses is less than before ; while there is good reason to believe that the average number of persons per house has increased owing to the depression of trade in the town, and the fact that in many instances two families have united and now occupy one house. This is confirmed also by the information regarding empty houses supplied by the Assistant Overseer. The percentage of these is higher than in any year since 1894, the first year for which the returns are given.

The distribution of the population in the four wards is shewn below :—

Population of the Wards.

Ward.	Population at census, 1901.	Estimated population on basis of new houses containing 4·79 persons.		
		Males.	Females.	Total.
Central	9,349	5,191	5,044	10,235
West	9,464	5,409	4,954	10,363
North	10,160	5,681	5,442	11,123
South	13,101	7,360	6,984	14,344
Borough ...	42,074	23,641	22,424	46,065

Housing.

The Assistant Overseer (Mr. A. Maywhort) has kindly allowed me to extract from the rate books the following information with regard to the total number of houses, and the number of unoccupied houses :—

Number of Houses on the Rate Book, Sept. 30th, 1904.

Houses rated under ...	...	£5 per annum ...	...	172
„ „ at £5 and under £10	„ „	„ „	...	7,019
„ „ £10	„ £20	„ „	...	2,372
„ „ £20	„ £30	„ „	...	260
„ „ £30	„ £40	„ „	...	93
„ „ £40	„ £50	„ „	...	42
„ „ £50	„ £60	„ „	...	17
„ „ £60	„ £70	„ „	...	16
„ „ £70	„ £80	„ „	...	5
„ „ £80	„ £90	„ „	...	8
„ „ £90	„ £100	„ „	...	6
„ „ £100	„ £200	„ „	...	25
„ „ above £200		„ „	...	6
Total ...				<u>10,041</u>

As compared with 1903 :—

Houses rated at £5 and under £10	shew an increase of	151
„ „ „ £10	„ „ „ „	85
„ „ „ £20	„ „ „ „	1
„ „ „ £30	„ „ „ „	3

The numbers of houses at other valuations remain the same.

Empty Houses.

TABLE 1.

RATEABLE VALUE.		Under £5.	£5, and under £10.	£10, and under £20.	£20, and under £30.	£30, and under £80.	TOTAL.
Central Ward	61	4	...	2	67
West Ward	93	21	3	2	119
North Ward	109	28	...	...	137
South Ward	39	60	1	1	101
Borough of Crewe ...			302	113	4	5	424
Empty houses, per cent. of houses on Rate Books in each group.	}	...	4·3	4·2	1·5	2·8	4·2

There is an increase of 123 empty houses as compared with 1903.

The houses rated at £5 and under £10 shewing an increase of 100

” ” ” ” £10 ” ” £20 ” ” ” ” 29

” ” ” ” £34 ” ” £80 ” ” ” ” 3

There are none empty under £5 ; during 1903 there were 9.

The following figures denote the percentages of empty houses to total houses on the rate books for the last eleven years :—

1894	...	2·0	1899	...	2·2
1895	...	2·4	1900	...	2·6
1896	...	2·8	1901	...	3·3
1897	...	2·6	1902	...	3·0
1898	...	2·7	1903	...	2·6
1904	...	4·2			

In the columns shown below are given the number of plans passed every year since 1891, and the numbers of habitation certificates granted since 1897. The figures for 1904 shew a great

reduction ; the number of habitation certificates granted being the lowest on record :—

New Houses.

Plans passed	1891	...	...	...	...	139
"	"	1892	...	...	...	169
"	"	1893	...	...	...	157
"	"	1894	...	...	...	238
"	"	1895	...	...	...	283
"	"	1896	...	...	...	317
"	"	1897	...	...	...	441
"	"	1898	...	...	...	308
"	"	1899	...	...	...	385
"	"	1900	...	...	...	201
"	"	1901	...	...	...	243
"	"	1902	...	...	...	400
"	"	1903	...	...	...	225
"	"	1904	...	...	...	157

Habitation certificates :—

1897	(11 months)	...	...	234
1898	...	...	...	327
1899	...	...	...	248
1900	...	...	...	230
1901	...	...	...	226
1902	...	...	...	257
1903	...	...	...	304
1904	...	...	...	181

Marriages.

The number of marriages during the year was 242, of which 163 took place in the Established Churches, and 79 in the Nonconformist and Catholic places of worship.

Year.	No. of Marriages.		Marriage-rate.	Marriage-rate in England and Wales.	
1897	...	244	...	12·64	16·0
1898	...	272	...	13·76	16·2
1899	...	315	...	15·56	16·5
1900	...	304	...	14·68	16·0
1901	...	250	...	11·80	15·9
1902	...	310	...	14·32	15·9
1903	...	297	...	13·05	15·6
1904	...	242	...	10·50	—

Births.

The total number of births registered within the Borough during 1904 was 1,425, of which number 729 were males and 696 females.

The birth-rate per 1,000 of the population was 30·9, being 1·0 per 1,000 lower than 1903.

The birth-rate for England and Wales in 1904 was 27·9 per 1,000 of the population, and is lower than the rate in any year on record.

Of the births registered 43 or 3·0 per cent. were illegitimate, as compared with 42 or 2·8 per cent. in 1903.

The following figures in parallel columns shew the birth-rate in the Borough of Crewe as compared with the rest of the country since 1893 :—

Year.		Crewe.		England & Wales.
1893	...	35·2	...	30·7
1894	...	33·9	...	29·6
1895	...	33·6	...	30·3
1896	...	31·8	...	29·6
1897	..	33·1	...	29·6
1898	...	34·5	...	29·3
1899	...	34·6	...	29·1
1900	...	34·3	...	28·7
1901	...	30·9	...	28·5
1902	...	32·6	...	28·6
1903	...	31·9	...	28·4
1904	...	30·9	...	27·9

The natural increase of the population, or the number by which the births exceeded the deaths, is shewn below :—

Year.	Births.	Deaths.	Natural Increase.
1893	1,228	694	534
1894	1,215	520	695
1895	1,237	608	629
1896	1,200	568	632
1897	1,278	627	651
1898	1,365	699	666
1899	1,400	695	705
1900	1,420	677	743
1901	1,311	710	601
1902	1,412	648	764
1903	1,454	651	803
1904	1,425	673	752

Deaths.

The total number of deaths registered within the Borough during 1904 was 659, giving a *gross* death-rate of 14·1 per 1,000.

Of the 659 deaths 344 were of males, and 315 of females.

Five of the deaths were of persons belonging to other districts, and must therefore be deducted; while 19 deaths of persons belonging to the Borough, but who died outside, must be added. This gives a correct number of 673, and a *corrected* death-rate of 14·6 per 1,000.

The slight increase in the death-rate (0·3 per 1,000) over last year, resulted from the slightly larger number of deaths under fifteen years of age. At all age periods over fifteen the mortality shews a reduction (*vide* TABLE 3).

In England and Wales the death-rate in 1904 was 16·2 per 1,000. The rates in the 76 large towns, and in the 142 smaller towns, were respectively 17·2 and 15·6.

TABLE 2.—Comparing the actual number of **Deaths** and the **Death-rate** with those of previous years:—

YEAR	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Whole year	Death-rate for whole year
1893 ...	171	193	158	172	694	19·9
1894 ...	154	115	121	130	520	14·5
1895 ...	171	115	164	158	608	16·5
1896 ...	137	125	107	199	568	15·1
1897 ...	182	141	166	138	627	16·2
1898 ...	196	164	190	149	699	17·6
1899 ...	209	142	182	162	695	17·1
1900 ...	212	159	148	158	677	16·3
1901 ...	156	163	193	198	710	16·7
1902 ...	173	161	135	179	648	14·9
1903 ...	173	151	166	161	651	14·3
Mean— 11 years }	176	148	157	164	645	16·2
1904 ...	159	145	171	198	673	14·6

Table 3.—Apportioning the Deaths during 1904 to the various age-periods:—

	Under 1 yr.	1 to 5.	5 to 15.	15 to 25	25 to 65	65 upwards	TOTAL.
Borough of Crewe, 1893 ...	211	139	38	19	181	106	694
„ „ 1894 ...	174	72	22	24	154	74	520
„ „ 1895 ...	198	90	31	30	169	90	608
„ „ 1896 ...	166	90	26	32	151	103	568
„ „ 1897 ...	189	95	19	19	182	123	627
„ „ 1898 ...	232	100	20	40	173	109	*674
„ „ 1899 ...	231	86	30	27	172	128	*674
„ „ 1900 ...	196	67	34	27	223	108	*655
„ „ 1901 ...	234	81	36	29	189	123	*692
„ „ 1902 ...	184	79	28	20	189	119	*619
„ „ 1903 ...	210	72	22	28	178	120	*630
Average for 11 years ...	202	88	28	27	178	109	632
Borough of Crewe, 1904 ...	226	88	29	25	174	112	*654
Central Ward ...	37	12	2	4	41	24	120
West Ward ...	57	26	5	6	44	19	157
North Ward ...	61	28	10	7	36	26	168
South Ward ...	71	22	12	8	53	43	209

* In addition to the above figures, 19 deaths in 1904, 21 in 1903, 29 in 1902, 18 in 1901, 22 in 1900, 21 in 1899, and 25 in 1898, occurred in persons temporarily resident outside the Borough, whose former addresses could not be ascertained.

As compared with 1903 the Central Ward shews a decrease in its mortality of 25 per cent.—while the other Wards each shew an increase: in the West, of 6, in the North, of 31, and in the South, of 7·7 per cent.

Mortality in relation to Season.TABLE 4.—**Monthly** Death-rate from all causes.

	1899	1900.	1901.	1902.	1903.	1904.
January ...	17·8	20·3	13·0	14·1	15·7	15·2
February ...	22·0	20·8	15·0	17·7	13·0	11·0
March ...	18·6	17·6	14·7	13·0	15·7	14·2
April ...	15·7	16·2	19·5	14·1	14·1	13·9
May ...	12·7	15·3	12·7	14·9	13·3	11·3
June ...	11·8	12·2	12·7	13·3	13·3	11·0
July ...	12·7	15·6	17·2	12·2	12·7	12·9
August ...	20·1	11·5	22·2	10·2	12·4	16·8
September ...	20·1	13·3	13·3	13·3	18·7	14·7
October ...	13·0	13·9	17·0	15·5	12·2	12·1
November...	11·5	15·6	17·8	14·4	14·1	16·6
December...	19·8	14·2	17·8	16·9	16·5	22·1

The following Table shews the monthly Zymotic, Respiratory, Phthisis, and Infantile death-rates during the year 1904:—

Month.	Zymotic.	Respiratory.	Phthisis.	Infantile. [Per 1000 born.]
January ...	1·3	3·6	0·5	187
February ...	1·05	2·6	0·2	131
March ...	1·3	3·4	1·05	138
April ...	0·5	3·1	1·0	107
May ...	0·7	2·3	1·0	132
June ...	1·0	1·8	0·2	108
July ...	1·5	2·3	1·0	137
August ...	5·5	0·7	—	224
September ...	3·6	0·7	0·7	234
October ...	2·9	2·1	0·2	171
November ...	2·1	5·5	0·2	154
December...	2·9	6·5	1·0	204

Uncertified Deaths.

These are deaths the causes of which have not been certified by a medical practitioner or by the Coroner after inquest.

Year	Uncertified deaths.		Percentage of total deaths.	
1893	...	8	...	1.1
1894	...	8	...	1.5
1895	...	6	...	0.98
1896	...	4	...	0.7
1897	...	3	...	0.4
1898	...	3	...	0.4
1899	...	8	...	1.1
1900	...	10	...	1.4
1901	...	11	...	1.5
1902	...	3	...	0.4
1903	...	6	...	0.9
1904	...	3	...	0.4

Still-born Children.

The total number of still-born children interred in the Cemetery and Coppenhall Churchyard during 1904 was 75 or 5.2 per cent. of the total births. Of these 22 were males and 21 females, and in 32 cases the sex was not stated. The figures for previous years are appended.

Total number of total births				Total number of total births			
1890	...	36	3.9	1897	...	56	4.2
1891	...	30	3.0	1898	...	56	4.1
1892	...	51	4.8	1899	...	63	4.5
1893	...	48	3.9	1900	...	55	3.8
1894	...	37	3.0	1901	...	63	4.8
1895	...	71	5.8	1902	...	86	6.0
1896	...	65	5.4	1903	...	64	4.4
1904 ... 75 ... 5.2							

Average of last 14 years (1890—1903) ... 4.4

The first step towards notification of still-births is made in the Rules of the Central Midwives Board, No. 18 (2) of which reads thus:—

“STILLBIRTHS: In all cases where a registered medical practitioner is not in attendance the midwife shall, as soon as possible after the occurrence of a still-birth, notify the same to the local supervising body.

“A child is deemed to be still-born when it has not breathed or shown any sign of life after being completely born.”

Street Register.

Class.	Name of Street.	No. of deaths during 1904.
1.	West Street	21
2.	Walthall Street	18
3.	Edleston Road	17
4.	Naylor Street	16
5.	Underwood Lane	14
6.	{ Ramsbottom Street Mill Street }	13
7.	Alton Street	12
8.	Alexandra Street	11
9.	{ Holland Street Middlewich Street }	10
10.	{ Bedford Street Beech Street Westminster Street }	9
11.	{ Broad Street Flag Lane Market Street New Street Ridgway Street }	8
12.	{ Chetwode Street Gresty Road Lord Street Nantwich Road Oakley Street Wistaston Road }	7
13.	{ Albert Street Cemetery Road Earle Street... .. Glover Street Peel Street Railway Street Samuel Street South Street }	6

Each of the other streets in the Borough (where deaths occurred) has had less than 6 deaths in it during the year.

Coroner's Inquests.

INQUESTS were held as to the cause of death in 45 cases. Death was attributed to the following causes:—Natural Causes 21, Violence:—Falls 7, Burns and Scalds 5, Suicide 2, Overlying 1, Other Forms of Violence 9.

Infantile Mortality.

Number of deaths under one year	... ..	228
Deaths per 1,000 births	... ..	160
Deaths—England and Wales—per 1,000 births	...	146
Deaths—76 great towns—per 1,000 births...	... ..	160
Deaths—142 smaller towns—per 1,000 births	... ..	154
Deaths—Rural England and Wales—per 1,000 births		125

The mortality under this heading shews an increase of 17 deaths as compared with 1903, while the death-rate per 1,000 births is 14 above the rate for England and Wales.

The following table, giving the causes of death in infancy, shows that the conditions grouped under the heading of Immaturity account for 33 per cent. of the total. Next in importance stand disorders of digestion, of which diarrhœa forms the bulk, forming 25 per cent. of the total. Many of the deaths returned as due to convulsions, and grouped under nervous diseases, ought properly to belong to this group, the cause lying very frequently in indigestion, the result of unsuitable diet.

Diseases of the Respiratory System, such as bronchitis, pneumonia, etc., caused 15 per cent. of the infantile mortality, and then in diminishing importance follow tubercular, nervous, and infectious diseases.

TABLE 5.—Infant deaths classified under principal groups of causes of deaths.

	MONTHS.												Totals
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	12th	
I.—IMMATURITY.													77
<i>a.</i> Premature Birth	23	1	...	1	...	...	1	...	...	...	...	...	26
<i>b.</i> Congenital Malformations	2	...	1	...	...	...	...	...	...	...	...	...	3
<i>c.</i> Atelectasis	2	...	...	...	...	...	...	...	...	...	...	...	2
<i>d.</i> Atrophy, Debility, Marasmus	19	9	5	2	3	...	...	2	2	...	...	4	46
II.—DISORDERS OF DIGESTION.													53
<i>a.</i> Diarrhœa	1	4	2	6	...	1	3	4	2	1	2	4	30
<i>b.</i> Enteritis ... ..	...	...	1	2	1	1	1	...	2	...	...	1	9
<i>c.</i> Others	2	1	1	2	2	2	1	1	...	...	2	...	14
III.—DISEASES OF RESPIRATORY SYSTEM.	1	1	3	3	4	3	2	1	5	6	4	4	37
IV.—TUBERCULAR DISEASES.													22
<i>a.</i> Tabes Mesenterica	1	3	2	2	3	...	1	1	...	...	...	...	13
<i>b.</i> Tubercular Meningitis, Hydrocephalus ... ..	...	...	...	1	...	...	...	...	1	2	...	...	4
<i>c.</i> Other forms of Tuberculosis ... ..	...	...	...	...	1	...	1	1	...	2	...	...	5
V.—DISEASES OF NERVOUS SYSTEM.													17
<i>a.</i> Convulsions	2	3	2	1	...	...	2	...	...	...	...	3	13
<i>b.</i> Others	1	1	...	1	...	...	...	...	1	...	...	...	4
VI.—INFECTIOUS DISEASES.	...	4	1	...	...	1	1	...	2	1	3	...	13
VII.—ALL OTHER CAUSES.	2	...	2	2	...	1	...	...	...	...	2	...	9
Totals	56	27	20	23	14	9	13	10	15	12	13	16	228

TABLE 6.—Rate of Mortality during the past 9 years of children under one year of age, from principal infantile diseases per 1,000 births.

	1896.		1897.		1898.		1899.		1900.		1901.		1902.		1903.		1904.	
	Total Deaths.	Rate per 1,000 births.	Total deaths.	Rate per 1,000 births.	Total deaths.	Rate per 1,000 births.	Total deaths.	Rate per 1,000 births.	Total deaths.	Rate per 1,000 births.	Total deaths.	Rate per 1,000 births.	Total deaths.	Rate per 1,000 births.	Total deaths.	Rate per 1,000 births.	Total deaths.	Rate per 1,000 births.
From all causes	156	...	186	...	232	...	231	...	196	...	238	...	186	...	211	...	228	...
ditto	...	138	...	146	...	169	...	165	...	138	...	181	...	131	...	145	...	160
Diarrhœa	19	...	45	...	34	...	34	...	26	...	48	...	23	...	10	...	30	...
ditto	...	16	...	35	...	24	...	24	...	18	...	36	...	16	...	6	...	21
Lung diseases	63	...	46	...	37	...	39	...	23	...	33	...	36	...	40	...	37	...
ditto	...	52	...	35	...	27	...	28	...	16	...	25	...	25	...	27	...	26
Convulsions	11	...	15	...	10	...	22	...	18	...	10	...	15	...	14	...	13	...
ditto	...	9	...	11	...	7	...	16	...	12	...	7	...	10	...	9	...	9
Premature Birth	18	...	20	...	22	...	27	...	25	...	28	...	28	...	25	...	26	...
ditto	...	15	...	15	...	16	...	19	...	17	...	21	...	19	...	17	...	18
Tabes Mesenterica	4	...	8	...	15	...	14	...	12	...	15	...	7	...	10	...	13	...
ditto	...	3	...	6	...	10	...	10	...	8	...	11	...	4	...	6	...	9
Measles	2	...	1	...	8	...	0	...	2	...	1	...	5	...	0	...	3	...
ditto	...	2	...	0.8	...	5	...	0	...	1	...	0.7	...	3	...	0	...	2
Whooping Cough	1	...	16	...	3	...	17	...	4	...	8	...	4	...	14	...	6	...
ditto	...	1	...	12	...	2	...	12	...	2	...	6	...	2	...	9	...	4
Tubercular diseases	1	...	0	...	3	...	4	...	6	...	14	...	5	...	6	...	9	...
ditto	...	1	...	0	...	2	...	3	...	4	...	10	...	3	...	4	...	6
Debility	14	...	12	...	54	...	30	...	53	...	59	...	29	...	39	...	47	...
ditto	...	12	...	9	...	39	...	21	...	37	...	45	...	20	...	26	...	32
Other causes	33	...	23	...	46	...	44	...	27	...	22	...	34	...	53	...	44	...
ditto	...	27	...	17	...	33	...	31	...	19	...	16	...	24	...	36	...	31

Particulars of Deaths of Illegitimate Children during 1904.

Age.	Sex.	Cause of Death.
4 years	M. ...	Diphtheria: Exhaustion.
1 month	M. ...	Convulsions.
2 months	F. ...	Congestion of Lungs: Exhaustion.
1 hour	F. ...	Premature Birth.
17 days	M. ...	Atelectasis: Convulsions.
7 months	M. ...	Tubercular Peritonitis.
8 months	M. ...	Gastro-Enteritis: Exhaustion.
7 months	M. ...	Diarrhœa.

Comparing death-rates per 1,000 births of each class among legitimate and illegitimate children.

	1896	1897	1898	1899	1900	1901	1902	1903	1904
Infantile death-rate of legitimate children	139	144	166	162	138	180	130	147	159
Infantile death-rate of illegitimate children	120	172	255	228	125	200	156	71	162

From this it would seem that illegitimate children in Crewe have as good a chance of surviving the first year of life as the legitimate.

Vaccination.

I am obliged to the Registrar of the Sub-District of Crewe (Mr. T. W. Lovatt) for his kindness in supplying the following information.

YEAR	1897	1898	1899	1900	1901	1902	1903	1904
Births registered	1278	1365	1400	1420	1311	1412	1454	1436
Successfully vaccinated	921	913	945	990	900	1016	1060	1050
Certificates of insusceptibility ...	4	1	3	5	6	3	2	5
Certificates of exemption (Conscience Clause) ... ..	...	35	66	40	33	22	33	21
Had smallpox ... ..	...	...	...	...	...	...	...	...
Died unvaccinated	125	159	155	133	143	128	140	133
Postponed by medical certificate	49	75	61	43	24	33	43	35
Removal to other districts ...	38	52	44	59	49	51	56	50
In abeyance	141	130	126	150	156	159	120	142
Percentage successfully vaccinated	72	66	67	69	68	71	72	73
Percentage successfully vaccinated excluding those who died unvaccinated	79	75	75	76	77	79	75	80

Zymotic Diseases.

The diseases belonging to this group shewed a considerable increase during 1904, due chiefly to a very extensive outbreak of Measles.

The death-rate from these diseases also shews an increase, being 2·04 as compared with 1·6 for 1903. The proportion in which the seven more important members of this group have contributed to the mortality is shewn in Table 7. There it will be seen that the disease which is accountable for the majority of these deaths is Diarrhœa. Then in order come Measles, Whooping Cough, Scarlet Fever, Diphtheria and Enteric Fever. Ninety per cent. of these deaths occurred under five years of age.

TABLE 7.—Number of **Deaths** from the Seven Principle Zymotic Diseases during 1904, in the Borough of Crewe:—

	Under 5 years.	Over 5 years.	Total.	Rate per 1,000.
Smallpox ... ..	...	...	...	...
Diphtheria and Membranous Croup	2	1	3	0·06
Scarlet Fever	7	4	11	0·23
Enteric Fever ... ..	...	1	1	0·02
Measles	13	...	13	0·28
Whooping Cough	12	...	12	0·26
Diarrhœa	33	1	34	0·73
Totals	67	7	74	1·6

The mortality from these diseases was in England and Wales 1·94, in the 76 large towns 2·49, in the 142 smaller towns 2·02, and in rural England and Wales 1·28.

Of the **Notifiable Diseases** 459 notifications were received, being 35 more than 1903.

For comparison the corresponding figures for 1903 for each notifiable disease are given :—

Year.	Small-pox.	Diphtheria and Membranous Croup.	Scarlet Fever.	Enteric Fever.	Erysipelas.	Puerperal Fever.	Total.
1903 ...	5	150	212	11	40	6	424
1904 ...	...	53	351	2	52	1	459
Increase 1904 ...	...	...	139	...	12	...	35

From this it will be seen that Scarlet Fever contributed 76 per cent. of the cases notified.

Age Distribution.—Only 1·3 per cent. of the notifiable diseases occurred during the first year of life, while 28 per cent. were from one to five years of age, and 56 per cent. from five to fifteen years of age. Fifteen per cent. of the cases notified were over fifteen years of age.

Local Distribution.—The Central Ward had the smallest number of notified infectious cases, viz., 58, the North having 114, the West 125, and the South 162.

The distribution of the deaths, the case fatality, and the monthly incidence are given in the following tables.

TABLE 8.—Number of deaths from the Seven Principal Zymotic Diseases in the various **Wards** during 1904 :—

	Central.	West.	North.	South.
Smallpox ... ..	...	...	...	...
Diphtheria and Membranous Croup	0	2	1	...
Scarlet Fever	1	3	3	4
Enteric Fever ... ..	...	1	...	...
Measles	1	2	9	1
Whooping Cough ... ..	...	3	4	5
Diarrhœa	4	9	9	12
Totals	6	20	26	22

TABLE 9.—Case fatality of **Notifiable** Zymotic Diseases :—

Disease.	Cases Notified.	Deaths.	Case Fatality per cent.
Smallpox ... ..	...	...	...
Diphtheria and Membranous Croup ...	53	3	5·6
Scarlet Fever	351	11	3·1
Enteric Fever	2	1	50·0
Erysipelas	52	5	9·6
Puerperal Fever	1	3	?

TABLE 10.—Shewing the number of Notifications received each month during the year:—

	Small-pox.	Diphtheria and Membranous Croup.	Scarlet Fever.	Enteric Fever.	Erysipelas.	Puerperal Fever.	Totals
January	8	16	1	...	...	25
February	5	14	...	2	...	21
March	5	24	...	5	1	35
April	5	30	...	3	...	38
May	5	42	...	5	...	52
June	2	23	...	2	...	27
July	3	19	...	5	...	26
August	6	42	1	6	...	55
September	4	37	...	4	...	45
October	4	46	...	11	...	61
November	2	19	...	4	...	25
December	4	39	...	5	...	46
Totals	53	351	2	52	1	459

Notification Fees.

The cost of notification fees paid to Medical Practitioners and the cost of notification per 1,000 of the population has been as under:—

					Cost per 1,000 of the population.		
1896 (three months)	...	...	£19	5	0		
1897 ...	...	...	£52	15	0	£1	7 4
1898 ...	...	...	£22	17	6	£0	11 7
1899 ...	...	...	£24	12	4	£0	12 1
1900 ...	...	...	£38	7	8	£0	18 9
1901 ...	...	...	£41	0	7	£0	19 4
1902 ...	...	...	£36	6	0	£0	16 9
1903 ...	...	...	£52	0	7	£1	2 10
1904 ...	...	...	£53	11	0	£1	3 2

Disinfection.

During the year 391 houses were disinfected, the number of houses disinfected after the occurrence of notifiable infectious diseases being 352: after deaths from Measles, 10; after deaths from Phthisis, 17; after deaths from Whooping Cough, 7; after death from Cancer, 1; after death from Diarrhoea, 1; and after deaths from Influenza, 3. In addition to the above, eight schools were disinfected during the year.

The bedding and clothing from these houses, as well as sixty-nine sets of bedding from the Cottage Hospital, were removed to the Isolation Hospital, and disinfected by passing through the Washington Lyon disinfecter.

The following quantities of disinfectants were used during the year:—

8 tons of Carbolic Powder (15%) used chiefly for nightsoil purposes.

$\frac{1}{2}$ -ton of Izal Powder, used chiefly for distribution to householders.

20 gallons of Izal Fluid, used in houses where cases of infectious disease occurred.

50 lbs. of Formalin Tablets for room disinfection.

3 dozen sulphur candles.

Bacteriological Examinations.

Table 11.—The following Table shews the number of examinations made during the year, by arrangement with Prof. Delepine, Owen's College, Manchester:—

Nature of Specimen.	Negative.	Positive.	Totals.
Typhoid Fever, Blood Serum	5	0	5
Diphtheria, Throat Swabs ...	16	7	23
Phthisis, Sputa	21	8	29
Totals	42	15	57

Smallpox.

Cases notified—0.

In spite of the continued presence of Smallpox in many surrounding districts, the town has enjoyed complete immunity from this disease during the year. The only incident which created any apprehension occurred in March, when four men, who three days before had been in contact with a case of Smallpox in Manchester, arrived in Crewe. They were kept under observation, but fortunately did not develop Smallpox, owing probably to the fact that they had been recently revaccinated.

Table 12.—Actual number of deaths occurring from Smallpox in the Borough of Crewe during each year since 1874:—

1874	...	4 deaths.	1882	...	0 deaths.
1875	...	1 „	1883	...	1 „
1876-1879		0 „	1884	...	1 „
*1880	...		1885-1904		0 „
1881	..	0 „			

*No record.

Diphtheria and Membranous Croup.

Cases notified	...	...	...	...	...	53
Deaths	...	...	...	...	...	3
Fatality per cent.	...	...	...	...	...	5·6
Cases removed to hospital	...	...	...	...	...	13

Cases and Deaths in previous years since 1897.

Year	...	...	1897.	1898.	1899.	1900.	1901.	1902.	1903.
Cases	...	...	66	40	46	36	112	136	150
Deaths	...	...	11	3	14	4	16	28	18
Fatality per cent.	...	...	16·6	7·5	30·4	11·1	14·2	20·5	12·0

The number of cases reported during the year was 97 less than during 1903, and the fatality shews a very satisfactory and substantial diminution, only three deaths being recorded.

Almost one-half of the cases were from the South Ward, the distribution being:—South Ward 25, North Ward 11, West Ward 12, and Central Ward 5.

The bacteriological examination of swabs from the throats of suspected cases has proved of great service. By this means it was proved that 16 cases of "sore throat" were not caused by the diphtheria bacillus, and consequently the usual measures of notification, hospital isolation, etc., were spared. Negative results, however, in such cases are of much less service than positive, as the failure to find the organisms in any particular case may result from a variety of causes, even when it is a case of true diphtheria. The notification of cases on purely clinical grounds, even when the bacilli have not been found, is therefore fully justified and highly advisable. From a clinical point of view, the most striking feature of the cases notified is the absence of, or very slight, infectivity as shewn by the rarity of secondary cases in the same house, even when there are a number of susceptible children. The houses invaded numbered 51, only 2 less than the actual number of cases. Not only was there this absence of infectivity in the families affected, but as will be seen from Table 10, the disease shewed no tendency to assume epidemic form at any time during the year.

TABLE 13.—Actual number of deaths from Diphtheria and Membranous Croup occurring in the Borough of Crewe during each year since 1874 :—

1874 ... 0 deaths	1884 ... 4 deaths	1894 ... 2 deaths
1875 ... 7 „	1885 ... 4 „	1895 ... 2 „
1876 ... 7 „	1886 ... 5 „	1896 ... 10 „
1877 ... 2 „	1887 ... 16 „	1897 ... 11 „
*1878 ... „	1888 ... 14 „	1898 ... 3 „
1879 ... 2 „	1889 ... 8 „	1899 ... 14 „
*1880 ... „	1890 ... 4 „	1900 ... 4 „
1881 ... 1 „	1891 ... 3 „	1901 ... 16 „
1882 ... 4 „	1892 ... 9 „	1902 ... 28 „
1883 ... 6 „	1893 ... 19 „	1903 ... 18 „
1904 ...	... 3 deaths.	

*No record.

The average annual number of deaths for 29 years since 1874—7.

Scarlet Fever.

Cases notified	...	...	...	...	351
Deaths	...	...	...	...	11
Fatality per cent.	...	...	...	...	3·1
Cases removed to hospital			...	...	285

(Or 81 % of those notified).

Cases and deaths in previous years since 1897.

Year	1897.	1898.	1899.	1900.	1901.	1902.	1903.
Cases	201	57	50	211	160	96	212
Deaths	7	3	1	8	6	3	9
Fatality per cent.	3·4	5·2	2·0	3·7	3·7	3·1	4·2

The number of cases notified was the greatest of any year since 1896, when the Infectious Diseases (Notification) Act, 1889, came into force in the Borough.

The percentage of cases treated in Hospital reached its highest point in 1904—81, as compared with 76 per cent. in 1903.

Seven deaths occurred in Hospital, giving a fatality of 2·4 per cent. among the hospital treated cases as compared with 4 deaths at home, giving a fatality of 6 per cent. among home treated cases.

The numbers occurring in each Ward and the monthly distribution are shewn in the following table :

	Central.	West.	North.	South.
January	3	3	8	2
February	—	6	4	4
March	—	6	7	11
April	—	19	5	6
May	2	15	17	8
June	4	14	2	3
July	4	2	6	7
August	7	14	13	8
September	6	6	11	14
October	14	8	4	20
November	2	3	1	13
December	2	8	7	22
	44	104	85	118

The cases were well distributed throughout the year, the only tendency to concentration being in the South Ward during the last quarter. Generally speaking the disease was of a very mild type and this led to many cases been entirely overlooked until others had become infected by them. An outbreak of German Measles (a mild non-fatal disease, with a rash closely resembling that of Scarlet Fever) during the summer months added greatly to the difficulties of diagnosis.

TABLE 14.—Actual number of deaths from Scarlet Fever occurring in the Borough of Crewe during each year since 1874.

1874 ... 9 deaths	1884 ... 0 deaths	1894 ... 8 deaths
1875 ... 43 „	1885 ... 13 „	1895 ... 22 „
1876 ... 4 „	1886 ... 9 „	1896 ... 18 „
1877 ... 22 „	1887 ... 7 „	1897 ... 7 „
1878 ... many „	1888 ... 8 „	1898 ... 3 „
1879 ... 77 „	1889 ... 16 „	1899 ... 1 „
*1880 ...	1890 ... 0 „	1900 ... 8 „
1881 ... 28 „	1891 ... 2 „	1901 ... 6 „
1882 ... 7 „	1892 ... 3 „	1902 ... 3 „
1883 ... 7 „	1893 ... 19 „	1903 ... 9 „
1904 ...	... 11 deaths.	

* No record.

The average annual number of deaths for 29 years since 1874—12.

Enteric Fever.

Cases notified ...	...	...	...	...	2
Number of deaths ...	...	...	...	...	1
Fatality per cent. ...	...	...	...	...	50

Cases and Deaths in previous years since 1897.

Year.	1897.	1898.	1899.	1900.	1901.	1902.	1903.
Cases ...	28	32	30	22	15	17	11
Deaths ...	3	7	4	10	3	2	4
Fatality per cent.	10·7	21·8	13·3	45·4	20·0	11·7	36·4

The number of cases notified is the lowest of which we have any record.

TABLE 15.—Actual number of deaths from Enteric Fever occurring in the Borough of Crewe during each year since 1874.

1874 ... 4 deaths	1884 ... 13 deaths	1894 ... 5 deaths
1875 ... 15 „	1885 ... 4 „	1895 ... 6 „
1876 ... 8 „	1886 ... 7 „	1896 ... 9 „
1877 ... 12 „	1887 ... 11 „	1897 ... 4 „
*1878 ...	1888 ... 6 „	1898 ... 7 „
1879 ... 6 „	1889 ... 0 „	†1899 ... 4 „

*1880 ...	1890 ... 11 deaths	1900 ... 10 deaths
1881 ... 9 deaths	1891 ... 4 „	1901 ... 3 „
1882 ... 10 „	1892 ... 3 „	1902 ... 2 „
1883 ... 4 „	1893 ... 9 „	1903 ... 4 „
1904 ...	... 1 death	
* No record. † Death also occurred in a non-resident.		

The average annual number of deaths from Enteric Fever for 29 years since 1874—6.

Diarrhœa.

Number of deaths	...	...	...	...	34
Death-rate per 1,000	...	...	...	...	0·7

Of these deaths 30 took place among infants under 12 months old. The great preponderance of such deaths among artificially reared children justifies the view that the question of feeding is intimately associated with this occurrence. The following figures shew the result of enquiries made during the last three years into this question :—

Of 12 infants who died from diarrhœa in 1902, 2 were breast fed					
„ 11	„	„	„	1903, 4	„ „ „
„ 30	„	„	„	1904, 2	„ „ „
<u>53</u>				<u>8</u>	

The bottles used all had the long rubber tube, and in many cases, even with the youngest infants, the milk was supplemented by some other food.

Even where clean fresh milk is bought, the dirty condition of many of the houses must soon lead to its contamination and decomposition.

Condensed milks seem to be very much used, especially among the poorer people. These, no doubt, are excellent and useful preparations, but not for infants. They are deficient in fat and contain an excess of cane sugar, and their use for feeding infants is liable to produce rickets and should therefore be discouraged. In some cases which have come to my knowledge, the method of preparing the condensed milk for use was such as exposed the children to the further danger of gradual starvation.

TABLE 16.—Actual number of deaths occurring from Diarrhœa in the Borough of Crewe each year since 1874:—

1874 ... 21 deaths	1884 ... 32 deaths	1894 ... 13 deaths
1875 ... 19 „	1885 ... 6 „	1895 ... 49 „
1876 ... 21 „	1886 ... 39 „	1896 ... 22 „
1877 ... 5 „	1887 ... 14 „	+1897 ... 61 „
1878 ... 41 „	1888 ... 7 „	1898 ... 47 „
1879 ... 2 „	1889 ... 14 „	‡1899 ... 41 „
*1880 ...	1890 ... 15 „	+1900 ... 35 „
1881 ... 0 „	1891 ... 11 „	1901 ... 62 „
1882 ... 16 „	1892 ... 24 „	1902 ... 29 „
1883 ... 10 „	1893 ... 93 „	1903 ... 11 „
1904 ...	... 34 deaths	

* No record. † One case of Dysentery included in each year.

‡ One death of a non-resident included.

The average annual number of deaths for 30 years since 1874—26.

Measles.

Number of deaths ...	13
Death-rate per 1,000 ...	0·28

The well-known liability of Measles to become prevalent after a period of immunity was experienced during 1904. The first notification of the disease was received from the Head Mistress of Maw Green School towards the end of August. From this the disease spread rapidly through the medium of susceptible school children, and at the end of the year had invaded altogether 14 schools. In each school the department first and most seriously affected was the infants'. The very young children contributed by far the greatest number of cases.

The risk of such a disease as Measles spreading among infants at school raises the question of the advisability of children under five years of age attending day schools. Medical opinion at the present time is distinctly opposed to this, and a resolution passed at a recent conference of the Royal Sanitary Institute on School Hygiene relates to this very question. It is to the effect "that

having regard to the greater risk of susceptibility to infectious diseases amongst young children, no child should be permitted to begin formal instruction in school classes under the age of six years."

The number of scholars on the registers of public elementary schools in the Borough at the middle of 1904 was 9,342. Of these 1,270 or 13·6 per cent. were under five years old. It is questionable whether the educational benefits which such young children can derive outweigh the risks they run of contracting infectious diseases such as Measles and Whooping Cough. *All the deaths from both these diseases during 1904 occurred among children of five and under.*

The majority of parents are only too glad to have their children taken care of for a few hours daily, but when the school accommodation is already somewhat limited exclusion of children under five is justified.

There were 1,549 certificates granted for the exclusion of children from school on account of Measles as compared with 61 in 1903.

TABLE 17.—Actual number of deaths from Measles occurring in the Borough of Crewe during each year since 1874.

1874 ... 21 deaths	1884 ... 1 death	1894 ... 0 deaths
1875 ... 11 "	1885 ... 31 deaths	1895 ... 7 "
1876 ... 2 "	1886 ... 0 "	1896 ... 9 "
1877 ... 0 "	1887 ... 32 "	†1897 ... 1 "
†1878 ... 30 "	1888 ... 7 "	1898 ... 35 "
1879 ... 1 "	1889 ... 8 "	1899 ... 10 "
*1880 ...	1890 ... 14 "	1900 ... 17 "
1881 ... 9 "	1891 ... 1 "	‡1901 ... 3 "
1882 ... 1 "	1892 ... 5 "	1902 ... 18 "
1883 ... 18 "	1893 ... 34 "	1903 ... 0 "
1904 ...	...	13 deaths.

* No record. † The second half of the year only.

‡ One also occurred in a non-resident.

The average annual number of deaths from Measles for 30 years since 1874—11.

Whooping Cough.

Number of Deaths ...	...	...	...	12
Death-rate per 1,000	...	...	...	0·2

The number of deaths registered is 5 less than that of the preceding year, 12 as against 17 in 1903. The number of certificates granted for the exclusion of children from school on account of Whooping Cough was 189, as compared with 158 in 1903.

All the deaths occurred among children of 5 years of age and under.

TABLE 18.—Actual number of deaths from Whooping Cough occurring in the Borough of Crewe during each year since 1874.

1874 ... 1 death	1884 ... 14 deaths	1894 ... 19 deaths
1875 ... 9 deaths	1885 ... 11 „	1895 ... 7 „
1876 ... 2 „	1886 ... 8 „	1896 ... 8 „
1877 ... 9 „	1887 ... 4 „	1897 ... 26 „
*1878 ...	1888 ... 4 „	1898 ... 9 „
1879 ... 9 „	1889 ... 17 „	1899 ... 26 „
*1880 ...	*1890 ...	1900 ... 5 „
1881 ... 4 „	1891 ... 13 „	1901 ... 19 „
1882 ... 9 „	1892 ... 23 „	1902 ... 9 „
1883 ... 4 „	1893 ... 14 „	1903 ... 17 „
1904 ...	...	12 deaths.

* No record.

Average annual number of deaths for 28 years since 1874—11.

Erysipelas.

Cases notified	...	...	...	...	52
Number of deaths	...	...	...	...	5
Fatality per cent.	...	...	...	...	9·6

Cases and Deaths in the previous years since 1897.

Year	...	1897.	1898.	1899.	1900.	1901.	1902.	1903.
Cases	...	115	49	62	44	40	40	40
Deaths	...	9	3	2	)	3	4	7
Fatality per cent.		7	6	3	)	-	10	17

Puerperal Fever.

Cases notified	...	...	...	...	1
Number of Deaths	...	...	...	...	3
Fatality per cent.	...	...	...	...	?

Cases and Deaths in the previous years since 1897.

Year	...	1897.	1898.	1899.	1900.	1901.	1902.	1903.
Cases	...	7	4	10	7	1	4	6
Deaths	...	3	2	7	5	0	2	2
Fatality per cent.		42	50	70	71	0	50	33

There was only one case of this disease notified, but the registrar's returns of deaths shew that other three cases occurred during the year. The reason for their non-notification lies in the confusion which exists as to what conditions are included in the term "Puerperal Fever." This is a term which is entirely devoid of any accurate scientific meaning, and its use has been condemned by the Royal College of Physicians. The conditions which are generally classified under this heading include all cases of Puerperal Sepsis, and the College recommends as substitutes such terms as Puerperal Septicæmia, Puerperal Pyæmia, or Puerperal Septic Intoxication.

The practice of midwives is now subject to control under the Midwives Act, 1902, and the rules of the Central Midwives Board, providing for the notification to the local supervising authority of cases of Puerperal Fever, or of any rise of temperature above 100·4 degrees Fahrenheit, will probably bring to light cases of Puerperal Sepsis which in the past have escaped notification.

Phthisis and other forms of Tuberculosis.

Number of deaths from Phthisis	...	...	29
Mortality per 1,000 of the population	...	...	0·6
Number of Deaths from other forms of			
Tuberculosis	...	...	45
Mortality per 1,000 of the population	...	...	0·9

The number of deaths from Phthisis is 7 less than in the preceding year, while the deaths from the other forms of tubercular disease show an increase of 10.

A bacteriological examination of the sputum was made in 33 cases and in 13 the tubercle bacillus was found. After every death from Phthisis the Health Department offers to carry out the necessary disinfection of premises, clothing and bedding, and in 17 instances this was done.

TABLE 19.—Actual number of deaths from Phthisis occurring in the Borough of Crewe during each year since 1874 :—

1874 ... 31 deaths	1884 ... 25 deaths	1894 ... 34 deaths
1875 ... 30 „	1885 ... 33 „	1895 ... 42 „
1876 ... 27 „	1886 ... 34 „	1896 ... 33 „
1877 ... 19 „	1887 ... 39 „	1897 ... 29 „
*1878 ...	1888 ... 22 „	1898 ... 24 „
1879 ... 28 „	1889 ... 38 „	1899 ... 29 „
*1880 ...	1890 ... 36 „	1900 ... 42 „
1881 ... 26 „	1891 ... 23 „	1901 ... 38 „
1882 ... 28 „	1892 ... 24 „	1902 ... 22 „
1883 ... 45 „	1893 ... 31 „	1903 ... 36 „
1904 ...	... ..	29 deaths.

* No record.

The average annual number of deaths from Phthisis during 29 years since 1874—31.

TABLE 20.—Shewing the number of deaths which have occurred from Tubercular Diseases other than Phthisis since 1893.

	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904
Tubercular Meningitis	...	7	9	6	4	7	13	6	9	23	7	10	12
Tubercular Peritonitis	1	5	...	...	3	2	5	...	...	...	...	6	8
Tabes Mesenterica	23	20	18	19	4	12	18	15	12	18	13	12	12
Other forms of Tuberculosis	4	...	5	6	2	2	5	6	18	7	14	7	13
	28	32	32	31	13	23	41	27	39	48	34	35	45

Influenza.

Number of Deaths 7
Mortality per 1,000 of population 0·1

The number of deaths registered from this cause was three more than in 1903.

TABLE 21.

Vital Statistics of Crewe Borough.

Shewing Birth-rates and Mortality-rates in several groups.

Year.	Birth-rate	Death-rate. All causes.	Zymotic.	Respiratory	Phthisis	Diarrhoea.	Children Per cent. of total deaths under		Infants under 1 yr. per 1,000 births.
							1 yr.	5 yrs.	
1894 ...	33·9	14·5	1·3	3·3	0·9	0·3	33·4	47·3	143
1895 ...	33·6	16·5	2·6	3·2	1·1	1·3	32·5	47·3	166
1896 ...	31·8	15·1	2·0	4·1	0·8	0·5	29·2	45·0	138
1897 ...	33·1	16·2	2·8	3·7	0·7	1·5	30·3	45·7	146
1898 ...	34·5	17·6	2·6	3·0	0·6	1·2	33·1	47·4	169
1899 ...	34·6	17·1	2·3	2·8	0·7	0·9	33·2	45·7	165
1900 ...	34·3	16·3	1·8	2·3	1·0	0·8	28·9	38·9	138
1901 ...	30·9	16·7	2·5	3·0	0·8	1·4	33·5	44·9	181
1902 ...	32·6	14·9	2·0	2·7	0·5	0·6	28·7	41·2	131
1903 ...	31·9	14·3	1·6	2·5	0·7	0·2	32	43	145
Average for above 10 years.	33·1	15·9	2·1	3·0	0·7	0·8	31·4	44·6	152
1904 ...	30·9	14·6	2·04	2·9	0·6	0·7	33	47	160

TABLE 22.—Shewing death-rate per 1,000 from different causes since 1894.

Cause of Death.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.	1902.	1903.	Average for 10 years— 1894-1903.	1904.
Cancer ...	0·55	0·57	0·58	0·38	0·53	0·61	0·45	0·75	0·80	0·52	0·57	0·5
Diarrhœa ...	0·36	1·33	0·58	1·57	1·21	0·98	0·82	1·46	0·67	0·24	0·92	0·7
Respiratory Diseases	3·32	3·26	4·16	3·73	3·01	2·86	2·39	3·04	2·79	2·50	3·10	2·9
Measles ...	...	0·19	0·23	0·02	0·88	0·24	0·41	0·07	0·41	0·0	0·24	0·2
Erysipelas ...	0·05	0·05	0·10	0·23	0·07	0·04	...	0·07	0·09	0·15	0·08	0·1
Diphtheria ...	0·05	0·05	0·26	0·28	0·07	0·34	0·09	0·37	0·64	0·39	0·25	0·06
Scarlet Fever ...	0·22	0·59	0·47	0·17	0·07	0·02	0·19	0·14	0·06	0·19	0·21	0·2
Typhoid Fever ...	0·13	0·16	0·23	0·10	0·17	0·09	0·24	0·07	0·04	0·08	0·13	0·02
Whooping Cough ...	0·52	0·19	0·21	0·67	0·22	0·64	0·12	0·44	0·20	0·37	0·35	0·2
Old Age ...	0·72	0·98	0·87	0·93	0·68	0·89	0·82	0·78	0·97	0·94	0·85	0·7
Influenza ...	0·16	0·16	0·07	0·10	0·22	0·44	0·55	0·16	0·09	0·08	0·20	0·1
Premature Birth ...	0·64	0·57	0·47	0·54	0·55	0·66	0·60	0·66	0·64	0·54	0·62	0·5
Nervous Diseases ...	1·34	1·55	1·22	2·03	1·31	1·90	1·71	1·41	1·78	1·16	1·54	1·3
Digestive Diseases ...	0·69	0·76	0·63	0·49	1·67	1·45	0·96	0·82	0·80	1·47	0·97	1·0
Urinary Diseases ...	0·08	0·16	0·21	0·10	0·22	0·29	0·24	0·23	0·27	0·30	0·21	0·2
Heart Diseases ...	1·03	1·11	1·38	1·78	1·38	1·08	1·49	1·29	1·08	1·27	1·28	1·0
Phthisis ...	0·97	1·14	0·87	0·75	0·60	0·71	1·01	0·89	0·50	0·79	0·82	0·6
Other Tubercular Disease (excluding Tabes Mesenterica)	0·25	0·16	0·21	0·28	0·58	0·29	0·65	0·70	0·48	0·50	0·41	0·7
Tabes Mesenterica ...	0·50	0·51	0·10	0·38	0·53	0·37	0·29	0·42	0·30	0·26	0·36	0·2
Ill-defined ...	1·06	1·19	0·74	0·67	1·77	1·18	1·52	1·51	0·76	1·09	1·14	1·1
Violence ...	0·30	0·13	0·47	0·33	0·78	0·42	0·72	0·44	0·48	0·39	0·44	0·4

TABLE 23.—Shewing gains and losses in the death-rate per 1,000 of the population in the year 1904, as compared with the average rate of the ten years, 1894-1903.

GAINS.

Name of Disease	Average Rate during ten years 1894-1903.	Rate during 1904.	Gains per 1,000.	Probable number of lives saved during 1904.	Lives lost or gained during 1903.
Heart Diseases ...	1.28	1.08	0.20	9	1 lost
Diphtheria ...	0.25	0.06	0.19	9	7 lost
Phthisis ...	0.82	0.63	0.19	9	2 saved
Nervous Diseases ...	1.54	1.36	0.18	9	21 saved
Diarrhoea ...	0.92	0.76	0.16	8	42 saved
Respiratory Diseases	3.10	2.95	0.15	7	39 saved
Old Age ...	0.85	0.71	0.14	7	5 lost
Typhoid Fever ...	0.13	0.02	0.11	5	3 saved
Tabes Mesenterica ...	0.36	0.26	0.10	5	8 saved
Whooping Cough ...	0.35	0.26	0.09	4	1 lost
Premature birth ...	0.62	0.56	0.06	3	1 saved
Influenza ...	0.20	0.15	0.05	2	6 saved
Cancer ...	0.57	0.52	0.05	2	2 saved
Ill defined ...	1.14	1.10	0.04	2	1 lost
Violence ...	0.44	0.43	0.01	...	3 saved
Other causes ...	1.26	1.12	0.14	7	13 saved
Gross Gains	...	...	1.86	88	...

LOSSES.

Name of Disease.	Average Rate during ten years 1894-1903.	Rate during 1904.	Losses per 1,000.	Probable number of lives lost during 1904.	Lives lost or gained during 1903.
Tubercular Diseases other than Phthisis & Tabes Mesenterica	0.41	0.71	0.30	14	5 lost
Digestive Diseases ...	0.97	1.06	0.09	4	28 lost
Measles ...	0.24	0.28	0.04	2	17 saved
Scarlet Fever ...	0.21	0.23	0.02	1	4 saved
Erysipelas ...	0.08	0.10	0.02	1	3 lost
Urinary Diseases ...	0.21	0.23	0.02	1	7 lost
Gross Losses ...	...	...	0.49	23	...

Nett gain 1.37 or 65 lives.

N.B.—The death of a person in a population of 46,065 corresponds to a rate of 0.021 per 1,000. Hence the saving or losing of a rate of 0.021 means the saving or losing of 1 human life.

similarly 0.108 " " " 5 " lives
and 0.217 " " " 10 " "

TABLE 24.—Shewing Birth and Death-rates in England and Wales, and certain other towns during 1904.

	Population estimated to middle of 1904.	Birth-rate per 1,000.	Death-rate per 1,000.	Zymotic Death-rate	Respiratory Death-rate	Phthisis Death-rate	Deaths from other forms of Tuberculosis	Infant Deaths per 1,000 births
England and Wales.	33,763,000	27·9	16·2	1·94	...	...	...	146
Accrington ...	44,300	22·6	15·7	1·46	3·5	1·2	0·38	148
Aston Manor ...	80,363	29·1	15·8	2·9	...	1·2	...	187
Ashton-under-Lyne	44,541	27·0	17·2	1·8	3·4	0·09	0·008	172
Carlisle ...	47,350	26·9	19·7	1·3	3·3	1·4	0·7	152
Congleton ...	10,706	26·9	19·6	1·1	2·7	1·2	0·9	190
Dudley ...	50,567	35·18	18·8	2·6	3·7	0·8	...	179
Eccles ...	36,400	27·7	14·8	1·7	2·3	1·07	0·45	144
Keighley ...	43,490	23·3	17·7	2·8	2·9	1·37	0·78	156
Lancaster ...	43,570	24·4	13·0	0·9	2·2	1·05	0·8	153
Northwich ...	18,500	28·2	15·2	1·3	2·1	0·9	1·0	162
Stafford ...	22,572	28·75	16·96	1·47	2·7	1·18	1·09	155
Stoke-on-Trent ...	32,898	32·8	15·9	2·4	3·8	2·37	0·36	148
Wigan ...	64,249	34·59	21·49	3·14	4·7	1·08	0·4	188
Winsford ...	10,365	32·3	15·6	1·6	4·2	0·3	0·19	134
Wolverhampton ...	98,268	29·8	14·6	2·7	2·4	0·9	0·5	152
Southport ...	50,385	17·5	14·4	0·7	1·9	1·05	0·44	129
Stalybridge ...	28,415	23·7	18·6	3·9	3·4	1·1	...	210
Burton-on-Trent ...	51,934	26·0	15·05	1·5	2·4	1·4	0·36	118
CREWE ...	46,065	30·9	14·6	2·04	2·9	0·6	0·9	160

Hospital Accommodation.

The accommodation provided for the isolation of infectious diseases (apart from Small-pox) consisted originally of two ward pavilions and an observation block, containing in all 28 beds. This has been in use since October 16th, 1897, and was erected at a cost of £9,500 (including the cost of the site). Owing to the rapid increase in the population, and the increasing number of patients treated, it was found necessary to enlarge the Hospital by the addition of a two ward pavilion for diphtheria, together with extra housing accommodation for the nursing staff. The additions were commenced at the beginning of 1903, and on the 30th March, 1904, the opening ceremony was performed by the Mayoress, Mrs. Henry Taylor. The plans for the extension were prepared by George Bolshaw, Esq., of Southport, who was the architect for the original hospital, and the work was carried out by Messrs. Garner & Son, of Crewe. The total cost of the pavilion and addition to the house was £3,066.

Staff.—The staff consists of the Matron, 8 nurses (2 charge, 4 assistant, and 2 probationer nurses), and 6 maids (cook, housemaid, scullery maid, 2 ward maids and laundry maid). There is a non-resident ambulance attendant, who also acts as disinfecter for the Health Department, and a gardener. Occasional extra assistance has to be obtained in the laundry and grounds.

Several important changes in the staff took place during the year. In March, Miss Norris, who was appointed Matron when the Hospital was opened in 1897, sent in her resignation. The great success of the Hospital, and the public confidence which it has gained, were due almost entirely to the excellent management and the unceasing care which Miss Norris bestowed upon the Institution. Her successor, Miss Morgan, resigned her appointment in October, having received an appointment in a larger institution elsewhere. The present Matron, Miss Currie, entered upon her duties in October 1904.

The amount of work done during the year shews a very great increase over any preceding year. This was almost entirely due to the increased number of admissions of cases of Scarlet Fever. These have increased to 81 per cent. of the total number notified.

The following statement shews the number of cases dealt with during 1904 :—

					Scarlet Fever.	Diphtheria & Mem. Croup.
Remaining in Hospital at end of 1903	...	...	...	...	34	...
Admitted during 1904	...	...	...	...	285	13
					—	—
Total	...	...	...	...	319	13
Discharged cured during 1904	...	...	...	...	284	13
Died during 1904	...	...	...	...	7	...
					—	—
Remaining in Hospital at end of 1904	...	...	...	...	28	...

In addition to the disinfection of bedding and clothing taken from infected houses or from the Hospital Wards, it will be seen (page 27) that a considerable amount of work has been done for the Cottage Hospital in disinfecting bedding which has become infected with septic discharges.

The following shews the annual number of patients admitted to the Hospital since its opening, and the percentage of cases of Scarlet Fever removed to Hospital :—

			Total Number of Cases admitted.			Proportion of Scarlet Fever Cases removed.
1897	(from October)	...	26	...	...	—
1898	...	...	68	...	...	64%
1899	...	...	73	...	...	76%
1900	...	...	158	...	...	65%
1901	...	...	129	...	...	69%
1902	...	...	102	...	...	74·5%
1903	...	...	169	...	...	76%
1904	...	...	298	...	...	81%

For the following statement of expenditure for the year ending 31st December, 1904, I am indebted to the kindness of the Borough Accountant.

**Expenditure for the Year ending
31st December, 1904.**

	£	s.	d.	£	s.	d.
Salaries of Matron, Nurses, etc.	297	15	3
Uniform	23	3	10
Porter's Wages (proportion)	50	13	4
Coal, Fuel, etc.	146	2	9
Gas	9	9	8
Electric Lighting	44	9	0
Repairs, etc., to Electric Fittings	16	4	3
Water	16	9	6
Printing, Stationery, Advertising, etc.	11	11	11
Groceries	164	18	9
Butcher's Meat	144	16	5
Fish	60	16	9
Vegetables	28	13	9
Milk	113	16	9
Bread	48	3	11
				<hr/>		
				561	6	4
Medical Sundries	38	17	5
Drapery, Crockery, Hardware, etc.	65	1	10
Rates and Taxes	22	12	9
Cultivation of Grounds	86	10	9
Insurance	5	19	6
Telephonic Communication	7	16	0
Postages	0	19	0
Horse Hire	93	0	0
Repairs to Van, Disinfector, etc.	8	1	6
Corn for Fowls	4	2	0
Maintenance and Painting of Buildings	52	8	7
Extra Nurses	3	3	0
Cleaning Materials	24	16	2
Extra Assistance in Laundry	22	17	0
Sundries	12	2	2

Laying Water Trench	...	...	...	£	s.	d.
Interest on cost of Electric Main	..	...	...	3	9	0
Rent of Small Pox Hospital	...	...	...	13	11	9
				20	0	0
				<hr/>		
				£1,662 14 3		
				<hr/>		

Income.

Maintenance of Patients	...	...	...	£	s.	d.	£	s.	d.
Removal of Patients	...	...	...	69	6	0			
Rent of Land	...	...	...	2	2	6			
				1	2	6			
				<hr/>			72	11	0
From Cheshire County Council under									
Isolation Hospital Act	...	...	...				230	10	7
							<hr/>		
							£303 1 7		
							<hr/>		

Table 25.—Shewing the number, average residence, and cost of treatment, of patients from 1898.

Year.	Patients.			Total expenditure.	Average cost per patient	Daily cost per head for provisions.	Provisions.
	Total treated.	Average daily number.	Average residence in days.				
1898	68	9.1	48.0	£ 1,020 s. 2 d. 0	£ 15 s. 0 d. 0	s. 2 d. 4	£ 378 s. 19 d. 6
1899	73	9.6	48.0	1,083 7 1	14 16 9	1 11½	347 4 9
1900	158	20.3	47.0	1,161 11 8	7 7 0	1 1½	417 19 0
1901	129	17.0	48.0	1,367 0 10	10 12 0	1 5½	452 18 0
1902	102	11.7	42.0	1,173 5 9	11 10 0	1 5½	314 10 7
1903	169	22.4	48.5	1,404 6 7	8 6 2	0 11½	398 19 7
1904	298	34.2	42.0	1,642 14 3	5 10 3	0 10¾	561 2 4

N.B.—The above calculations of cost do not include repayment of principal nor payment of interest on capital.

The average length of stay in Hospital.

Scarlet Fever Patients, excluding cases which died	...	43.7 days
Scarlet Fever Patients, including cases which died	...	43.0 „
Diphtheria and Membranous Croup patients	...	19.5 „

Small-pox Hospital.

The Small-pox Hospital is situated upon the Corporation farm on the north side of Pym's Lane, off Minshull New Road. As it originally existed, excluding the part occupied by the caretaker and his family, there were two bedrooms available for patients, with suitable accommodation for a nurse. During 1903 further accommodation was provided by fitting up a small galvanised iron pavilion alongside the farm house. The Hospital has been unoccupied during the year, but has been kept ready for any emergency.

School Accommodation.

The school accommodation for the Borough, the number of scholars, and the proportion of the population of each ward attending school, are shewn in the table given below. There are 9,200 children on the registers, with an average attendance of about 8,000. The schools provide accommodation for 8,586 scholars.

Central Ward.

School.	Children on registers.			Per cent. of Population
Hightown Wesleyan	{	Boys ...	334	890
		Girls ...	299	
		Infants ...	257	
Central ...	{	Boys ...	333	903
		Girls ...	324	
		Infants ...	246	
Beech Street	{	Boys ...	331	969
		Girls ...	311	
		Infants ...	327	
St. Mary's R. C.	{	Mixed ..	265	370
		Infants ...	105	
Total ...			3,132	30.6

West Ward.

School.		Children on registers.		Per cent. of Population
Wistaston Road	...	Infants	183	183
West St. Council	...	Mixed	559	815
	{	Infants	256	
Hightown L. & N. W. Railway Company's	...	Boys	360	968
	{	Girls	373	
	{	Infants	235	
Total				18.9

North Ward.

Earle St. Wesleyan	...	Mixed	205	336
	{	Infants	131	
New Street	...	Infants	122	122
Maw Green	...	Mixed & Infants	120	120
Broad Street	...	Boys	322	797
	{	Girls	281	
	{	Infants	194	
Total				12.3

South Ward.

Pedley Street	...	Boys	125	434
	{	Girls	143	
	{	Infants	166	
Bedford Street	...	Boys	215	811
	{	Girls	334	
	{	Infants	262	
Edleston Road	...	Boys	383	936
	{	Girls	294	
	{	Infants	259	
Mill St. Wesleyan	...	Infants	164	546
	{	Mixed	382	
Total				12

At certain times of the year many of the departments become seriously overcrowded. This, however, will be met by the new schools which are being provided by the Education Committee.

All the schools have closets on the water carriage system, with the exception of the Broad Street Schools which are still provided with the old objectionable privy pails. The urinals at some of the schools have absolutely no flushing arrangements whatever, and in the summer, especially when they are exposed to the sun, they become extremely offensive.

Schools and Infectious Disease.

Owing to the outbreak of Measles, the number of school certificates granted is very greatly increased. It is well to bear in mind that these figures represent not only cases of infectious disease, but also healthy children who have been excluded on account of the occurrence of infectious disease in some other member of the family.

The following schools were closed owing to the spread of infectious diseases among the scholars:—

School	Closed	Re-opened	Disease
Broad St. Infants	Dec. 9th, 1903	Jan. 4th, 1904	Scarlet Fever
Edleston Rd. Infants	Feb. 22nd „	Apr. 11th „	Whooping Cough
Pedley St. Infants	„ „	Mar. 14th „	and „Chicken-pox”
Pedley St. Girls	Mar. 1st „	„ „	German Measles
Edleston Rd. Girls	„ „	Apr. 11th „	„ „
Mill St. Wes., Infants	Mar. 7th „	„ „	Measles and Whooping Cough
Wistaston Rd. Infants	Mar. 28th „	„ „	Measles
Hightown Wes. Infants	May 6th „	May 30th „	German Measles
Christ Church Infants	June 27th „	June 30th „ (Summer Holidays)	Measles
Maw Green (both depts.)	Sept. 26th „	Oct. 10th 1904	„
Beech St. Infants	„ „	Oct. 17th „	„
Earle St. Wes. (both depts.)... ..	Oct. 24th „	Nov. 21st „	„
New St. Infants	„ „	„ „	„
Broad St. (all depts.)	Oct. 31st „	„ „	„
Hightown Wes. (all depts.)	Nov. 7th „	Nov. 28th „	„
St. Pauls (all depts.)	„ „	„ „	„
St. Mary's Infants	Nov. 24th „	Dec. 18th „	„
Edleston Rd. Infants	Nov. 28th „	Dec. 12th „	Whooping Cough
St. Barnabas' Infants	Dec. 5th „	Dec. 22nd „	Measles
St. Paul's Infants	„ „	„ „	„

From this it will be seen that all the Infant Departments were closed at some time during the year. Measles accounted for the greatest amount of sickness, and also for the largest number of deaths, although Whooping Cough was little behind in this respect. As already pointed out, all the deaths from these two causes

occurred in children of five years of age and under, and there is only too good reason for believing that the attendance at school of children under five contributes greatly to their chances of falling victims to epidemic disease.

TABLE 26.—The following table shews the number of children for whom certificates, as required by the Education Department, were granted on account of the occurrence of *non-notifiable* infectious disease.

	TOTALS. 1903.	TOTALS. 1904.
Measles	61	1,549
Whooping Cough	158	189
Chicken-pox	143	86
Ringworm	49	30
Influenza	8	...
Mumps	45	87
Skin Disease	81	36
Sore Throat ... ..	...	17
TOTAL	545	1,994

The following certificates have also been issued in respect of *notified* disease:—

Preliminary certificates	291
Final Certificates	68
	<hr/> 359
Add on certificates for diseases not notified	1,994
Total number of certificates issued by M.O.H. ...	<hr/> 2,353

The system of notification between Head Teachers and the Medical Officer of Health continues to work very satisfactorily and has proved of great assistance to the Health Department.

Playgrounds and open Spaces.

These owned by the Corporation are:—

The Queen's Park.—Area a little over 35 acres, situate in the South Ward at the extreme South West boundary of the town.

South Ward playground, area 11,501 square yards. West Ward playground, area 8,356 square yards. North Ward playground, area 16,429 square yards.

The South and North Ward playgrounds require considerable alteration before they are likely to be much used by children. The provision of swings and other simple gymnastic appliances, and a smooth firm surface adapted to children's games would greatly enhance their value and popularity.

Inspections and General Work.

The premises which have been kept under regular supervision include 15 private slaughterhouses, 44 cowsheds, 78 dairies and milkshops, 7 common lodging houses, 4 houses let in lodgings, 267 factories and workshops, and also premises which are specially liable to create nuisances, *viz.*, pig-styes, stables, marine stores, fried fish shops, &c.

Reconstruction of Privies, etc.

The following figures give the approximate numbers of the different forms of closets, etc., existing in the town at the end of 1904, with the corresponding figures for 1903 for comparison:—

	1903.	1904.
Baths	1503	1629
Water Closets	4901	5422
Waste Water Closets	1018	1018
Pail Closets	2966	3021
Cesspool Privies	107	58
Fixed Receptacles	33	23
Uncovered Privy Middens	23	21
Covered Privy Middens	1292	1310
Uncovered Ashpits	175	151
Covered Ashpits	2269	2431
Dustbins	5820	6828

Offensive Trades.

The only offensive trade carried on within the Borough is that of gut scraping. The premises have been visited periodically during the year, and the business has been conducted without any cause for complaint.

In addition to the above there are two rag and bone stores in the Borough. One of these which gave rise to complaint from persons residing in its vicinity has been removed to more suitable premises.

Cowsheds.

There are forty-four cowsheds within the Borough. Of these six are not at present in occupation. These were visited frequently during the year. The majority of the cowsheds are old buildings, and were apparently erected at a time when the sanitary requirements of cowsheds did not receive any special attention. So far as the general structure will permit, some improvements have been made in lighting, ventilation, and drainage, but there is still much room for improvement. In several there is no provision for lighting or ventilation, in five the height is only six feet, and in twenty-three the height is between seven and eight feet. In fourteen the cubic space is not more than 300 cubic feet per cow, while the average for thirty-four cowsheds which have been remeasured is 450 cubic feet. The Local Government Board standard for cowsheds as contained in the model bye-laws is 800 cubic feet per cow, except where these are "habitually grazed on grass land during the greater part of the year, and when not so grazed are habitually turned out during a portion of each day." The bye-laws do not give any standard for cowsheds, the cows from which are habitually grazed or turned out. It cannot be said, however, that conditions such as exist in many cowsheds are likely to be conducive to the maintenance of a high standard of health among the cows.

A more stringent observance of the bye-laws should be insisted upon by the Health Committee. Where structural alterations are necessary there would be no hardship inflicted upon owners if after intimation, reasonable time was given for the carrying out of the work necessary.

Dairies and Milkshops.

There are 78 places in the Borough in which a retail trade in milk is carried on. Of these 56 are shops, 18 are producers' premises, and 4 are private houses. There are no dairies properly so called in the Borough, *i.e.*, shops in which milk and other farm products such as butter, cheese, and eggs are exclusively sold. Judging by the amount of attention which seems to be given it, the sale of milk in many instances is apparently a part of the shop's business which is not considered to require any special care. The milk is kept either in the tins in which it is received from the farm or wholesale dealer, or in earthenware dishes. The former are sometimes covered and stand either on the floor before or behind the counter, the latter are invariably without any cover and usually stand on a shelf or upon the counter. Alongside or close to this vessel are generally to be found vegetables, sweets, and many other articles. These vessels ought all to have some covering to prevent access of dust, flies, &c. All cans or other vessels used for the conveyance of milk in carts either for sale from them or from shops should be provided with covers.

Common Lodging Houses.

The number of common lodging houses on the register is 7. Two situated in Whitegates were removed when the property was taken down to provide a railway siding to the new town depôt. These were probably the worst premises of the sort in the town. Another house in Oak Street has been registered during the year.

The total accommodation provided by common lodging houses is 129 beds. There are, however, very many private houses where labourers and other working men in steady employment lodge. The character of the housing provided by these common lodging houses is of the most inferior description; none of the premises comply with the requirements of a lodging house, while structurally several are very defective.

Prosecutions for overcrowding and for using unregistered premises as common lodging houses were undertaken in four instances. The defendants in each case were dismissed on payment of costs.

Slaughterhouses.

There are fifteen slaughterhouses in use in the Borough. One of these was out of occupation for part of the year. The premises generally speaking are kept in a satisfactory, and some in an excellent condition.

An application for a licence for premises in Wesley Street was refused.

Meat Inspection.

This is a matter in which the Butchers' Vigilance Association has been of the greatest service. By the supervision which this Association exercises over the trade, the quality of meat exposed for sale is of a high standard. The ready co-operation of the Members of this Association with the Health Department is a matter for congratulation, as, with the present staff and considering the number of places in which slaughtering is carried on, anything like efficient inspection is extremely difficult, if not quite impossible to attain.

Six carcasses were examined in slaughterhouses upon the request of the owners. The disease in each case was tuberculosis. The whole carcass was condemned as unfit for human food in three instances, in the others only the affected portion was destroyed.

The lowest price paid for any of the carcasses was £12, 2s. 6d.

Inspection of Ice Cream Premises.

There are ten premises where ice cream is made. The one in Chetwode Street is the only one from which a business of any size is carried on. The occupier of these premises carries on a retail business and also supplies other five retail vendors.

The other premises are only occasionally used for making ice cream.

The premises are all in good sanitary condition and on every inspection both premises and utensils have been found clean.

Factories and Workshops.

There are 62 factories and 205 workshops in the Borough. The latter include a great many places such as dressmakers establishments where the business is a small one, and is carried on in a room of the dwelling-house set apart for the purpose. It sometimes happens that in such small workshops the business is carried on somewhat intermittently, and changes of address are frequent. This makes it difficult to keep an absolutely correct register, but so far as possible all such changes have been followed up.

TABLE 27—The following table of workshops shews the number in each Ward, and the nature of the trades carried on.

Trade.	Central.	West.	North.	South.	Borough.
Bakers and Confectioners ...	12	6	10	11	39
Dressmakers and Milliners ...	23	5	1	18	47
Tailors ...	10	3	1	1	15
Watchmakers and Jewellers ...	4	1	...	1	6
Tinsmiths ...	5	...	...	1	6
Cabinet Makers and Joiners ...	10	1	2	4	17
Bootmakers ...	8	6	6	10	30
Herb Beer Manufacturers & Bottlers	2	...	...	...	2
Saddlers ..	1	1	...	2	4
Cycle Repairers ...	2	...	...	3	5
Ice Cream Manufacturers...	3	3	...	4	10
Wheelwrights ...	...	...	...	1	1
Shirtmakers ...	1	...	...	...	1
Hosiers ...	1	...	1	...	2
Stonemasons...	2	1	...	1	4
Picture framers ...	1	1	...	3	5
Rag Stores ...	...	...	1	1	2
Blacksmiths ...	2	2	...	1	5
Laundry ...	...	...	...	1	1
Artificial Teeth Manufacturers ...	1	...	...	1	2
Scales Manufacturer ...	1	...	...	...	1
Totals	89	30	22	64	205

GENERAL SANITATION.—The condition of the workshops generally has been very satisfactory, although there were a few exceptions with regard to cleanliness. 41 notices relating to lime-washing were sent out and complied with. There was no instance of over-crowding.

BAKEHOUSES.—There is only one underground bakehouse in use. The only part of the business carried on underground is the mixing and the kneading of the dough.

By an order of the Home Secretary, dated November 14th, 1903, section 3 (sub-section 1) of the Factory and Workshop Act, 1901 is modified,

(1) as regards underground bakehouses by substituting “five hundred cubic feet of space to every person” for “two hundred and fifty cubic feet of space to every person”; and

(2) as regards bakehouses (other than such as are underground) where work is carried on at night by artificial light other than electric light by substituting in respect of the period between 9 in the evening, and 6 in the morning “four hundred cubic feet of space to every person” for “two hundred and fifty cubic feet of space to every person.”

This order came into force on the 1st day of January, 1904.

HOMEWORK—Lists of home workers have been received from the following :—

Compton and Sons, Clothing Factory, ...	52	outworkers
Marmion Clothing Factory,	2	„
A. Boden, Tailor,	4	„
C. Taylor, Shirtmaker,	3	„
Co-operative Society, Bootmakers,	1	„
„ „ Tailors,	1	„

The annual statistical return to the Secretary of State, which follows, gives a summary of the work done during the year.

FACTORIES, WORKSHOPS, LAUNDRIES, WORKPLACES AND HOMEWORK.

1.—INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS OF NUISANCES.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories (including Factory Laundries.)	61	...	...
Workshops (Including Workshop Laundries.)	257	44	2
Workplaces ... ..	...	...	...
Homeworker's Premises	4	...	...
Total	322	44	2

2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts :—*</i>				
Want of cleanliness	41	41	...	...
Want of Ventilation ... ..	...	...	...	...
Overcrowding ... ..	...	...	...	...
Want of drainage of floors ... ..	...	...	...	...
Other Nuisances ... ..	...	...	...	...
Sanitary accommodations { insufficient	1	1	...	...
unsuitable or defective ... ..	...	...	...	...
not separate for sexes ... ..	...	...	...	...
<i>Offences under the Factory and Workshop Act :—</i>				
Illegal occupation of underground bakehouse (S. 101)	...	...	...	...
Breach of special sanitary requirements for bake-houses (SS. 97 to 100).	...	...	...	...
Failure as regard lists of outworkers (S. 107) ...	1	1	...	1
Giving out work to be done { unwholesome (S. 108) ...	...	...	...	...
in premises which are { infected (S. 110) ...	...	...	...	...
Allowing wearing apparel to be made in premises infected by scarlet fever or small-pox (S. 109).	...	...	...	...
Other offences	1	1	...	1
Total	44	44	...	2

* Including those specified in Sections 2, 3, 7 and 8, of the Factory Act as remediable under the Public Health Acts.

3.—OTHER MATTERS.

Class.										Number.
Matters notified to H.M. Inspectors of Factories :—										
Failure to affix Abstract of the Factory and Workshop Act (S. 133) ...										...
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (S. 5) {										5
Notified by H.M. Inspector										5
Reports (of action taken) sent to H.M. Inspectors.										...
Other ... ..										...
Underground Bakehouses (S. 101) :—										
In use during 1903										1
Certificates granted { in 1903 ... ..										...
in 1904										1
In use at the end of 1904										1
Homework :—										Number of
List of Outworkers* (S. 107) :—										Lists. Outworkers.
Lists received										7 108
Addresses of outworkers ... { forwarded to other Authorities ...										2 6
received from other Authorities ...										... ..
Workshops on the Register (S. 131) at the end of 1904.										
Important classes of workshops, such as workshop bakehouses, may be enumerated here.	Bakers and Confectioners									39
	Dressmakers									47
	Tailors									15
	Cabinet Makers and Joiners									17
	Boot Repairers									30
	Others									57
Total number of workshops on Register										205

TABLE 28.—The following table shews the number of Factories in the Borough.

Industry.	Central.	West.	North.	South.	Borough.
Loco. Engine Works ...	...	1	...	*	1
Electric Lighting ...	2	...	...	1	3
Clothing Factories ...	...	1	2	2	5
Cabinet Maker and Joiner ...	3	...	...	...	3
Cycle Works ...	1	...	...	...	1
Bottling & Herb Beer Manufactory	2	...	...	1	3
Brewery ...	1	...	...	...	1
Aerated Water Manufactory ...	2	...	1	...	3
Letterpress Printing ...	3	2	1	1	7
Laundry ...	...	...	1	...	1
Sausage Maker... ...	2	1	1	1	5
Machine Smith ...	1	...	...	...	1
Wheelwright, Woodturner ...	2	...	1	...	3
Builder ...	2	1	2	2	7
Iron Founder ...	1	...	...	...	1
Baker ...	2	...	1	...	3
Brick Works ...	...	2	5	...	7
Fustian Cutting ...	1	2	...	...	3
Cattle Medicine ...	...	...	...	1	1
Firewood ...	...	1	...	1	2
Saw Mill ...	...	1	...	...	1
Total ...	25	12	15	10	62

* These works are also partly in the South Ward.

Sale of Food and Drugs Acts.

These Acts are administered by the County Council, to whose Chief Inspector, Mr. Laird, I am indebted for the following particulars of samples purchased in the Borough of Crewe, under the Sale of Food and Drugs Acts, during the year ending December 31st, 1904:—

Name of Sample.	No. of Samples.	No. of Samples certified as Adulterated.
Beer	12	—
Brandy	1	—
Butter	26	5
Ginger—Ground	1	—
Jam	2	1
Milk	51	3
Pepper	4	—
Vinegar	4	—
Whiskey	3	—
Totals	104	9

Particulars of prosecutions under the Sale of Food and Drugs Acts in the Borough of Crewe for the year ending 31st December, 1904.

No.	Nature of Offence	Result of Prosecution.
1	Selling Margarine as Butter ...	Fined £20, together with 26/6 costs.
2	„ „ „ ...	Fined 5/-, including costs.
3	„ „ „ ...	Defendant absconded before summons could be served.
4	Delivering Margarine, to purchaser, in a plain wrapper ...	Fined £20, together with 17/6 costs.
5	Delivering Margarine, to purchaser, in a plain wrapper ...	Ordered to pay 3/6 costs,
6	Selling Jam containing 2·5 grains of Salicylic Acid per pound of Jam	Fined 1/-, together with 29/6 costs.
7	Selling Milk adulterated with 2 per cent. of Water	Fined £3, together with 39/10 costs.
8	Selling Milk adulterated with 7 per cent. of Water	Fined £2, together with 37/10 costs.
9	Selling Milk adulterated with 3 per cent. of Water and deprived of 6 per cent. of its cream	Fined £2 together with 37/10 costs.

Work done by Sanitary Inspector's Department.

The Sanitary Inspector reports that the following matters have received his attention during the year:—

	1903.	1904.
Defective house drainage	194	165
„ Manure receptacles	13	7
„ Ashpits	46	51
„ Privy middens	69	62
„ Fixed receptacles	14	11
„ Cesspool privies	14	32
„ Water closets	82	100

	1903.	1904.
Defective Paving of yards and passages	42	55
„ Urinals	6	3
„ Eaves and rain-water spouting	96	40
„ Ventilating shafts (drains)	16	6
„ Channel shoots	129	54
„ Sink pipes	26	23
Nuisances from offensive accumulations	9	10
„ „ keeping of animals	10	8
„ „ stagnant water in cellars	10	9
„ „ offensive pools, ditches, etc.	11	15
„ „ smoke	8	3
House drains tested	45	49
Visits to cowsheds	96	70
„ Common lodging houses	405	143
Night Visits to ditto	18	8
Visits to slaughter-houses	408	180
„ Infectious disease cases	424	459
Notices for renewal of defective privies and ashpails	552	462
Licences issued in respect of removal of swine—		
Borough	1103	1206
Licences issued in respect of removal of swine—		
County	1536	2312
Statutory notices served	61	113
Persons supplied with disinfectants on application		
to office	622	742
Dogs brought into home	158	209
„ destroyed	130	182
„ claimed	28	27
Ice cream shops	—	10
Schools	—	85
Bakehouses	—	79
Fried fish shops	—	22
Pigstyes ... ..	...	24

Scavenging.

The work done by the scavenging staff shews an increase over the preceeding year of 263 loads of ashes, etc., and 228 paper bags. The increase in cost amounts to £61, 6s. 10d. The figures for the 8 previous years are given:—

	1896	1897	1898	1899	1900	1901	1902	1903	1904
Privies & Ashpits emptied...	17,788	25,383	32,051	31,962	33,455	25,171	20,617	25,485	28,371
Privy pails emptied	110,996	114,368	135,468	128,086	129,456	129,656	132,432	145,038	154,570
Dustbins	65,170	67,700	78,048	79,920	93,180	104,260	112,510	138,585	176,956
Paper bags ...	...	...	...	...	...	...	...	11,160	11,388
Number of Loads removed:—									
Day work ...	6,639	7,558	8,313	8,525	9,099	8,803	9,851	10,225	10,328
Night work ...	4,769	4,851	4,978	4,967	4,958	4,940	4,880	5,130	5,290
	11,408	12,409	13,291	13,492	14,057	13,743	14,731	15,355	15,618
Cost of removal:—	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Total cost ...	2243 0 10	2277 6 8	2486 7 7	2649 8 5	2812 1 2	2827 8 11	2984 9 3	3007 9 9	3068 16 7
Cost per Load ...	0 3 11½	0 3 8	0 3 8½	0 3 11	0 4 0	0 4 1¼	0 4 0½	0 3 11	0 3 11
Cost of Day Work per load	0 3 4½	0 2 7½	0 2 7¼	0 2 11½	0 3 1½	0 3 2½	0 3 0½	0 3 3¼	0 3 3
Cost of Night Work per load	0 4 8¼	0 5 3½	0 5 7½	0 5 6½	0 5 6¾	0 5 8½	0 6 1¼	0 5 1	0 5 3

Water Supply.

The Water Supply is owned by the London & North Western Railway Company and is obtained from artesian wells at Whitmore. The daily consumption per head has increased but little for the past 4 years and now is only 13·8 gallons per head.

TABLE 29

Year.	Quantity consumed during the year in gallons.	No. of Inhabited Houses.	Population estimated to middle of year.	Consumption per house per annum in gallons.	Consumption per head of Population per day in gallons.
1893	116,348,000	7,125	34,866	16,329	9·14
1894	134,269,300	7,190	35,796	18,674	9·47
1895	139,736,000	7,404	36,726	18,873	10·42
1896	148,833,000	7,638	37,656	19,485	10·79
1897	149,088,000	7,945	38,586	18,765	10·58
1898	160,555,000	8,182	39,516	19,622	11·13
1899	175,551,000	8,582	40,446	20,455	11·88
1900	185,026,000	8,808	41,376	21,006	12·24
1901	220,604,500	8,771	42,307	25,151	14·28
1902	228,111,000	9,208	43,237	24,773	14·45
1903	243,332,390	9,500	45,505	25,613	14·6
1904	233,434,413	9,617	46,065	24,273	13·8

These figures include 20,500,000 gallons, which is an approximate estimate of the quantity of water used in the Railway Company's property.

Sewage Disposal.

There has been no change in the method of sewage disposal, the bulk of the sewage being still treated on the Corporation Farm by broad irrigation, while about one fifth is treated by the double contact bacterial method.

Forty samples of sewage effluents from the bacteria beds have been submitted by the Borough Surveyor for analysis. On the whole the effluents have proved to be very satisfactory.

Back Passages.

The condition of a number of back passages was reported during the year and the attention of the Works Committee directed to them. In many streets such passages form the means of access to houses most commonly used, and in addition there is often a considerable amount of heavy traffic by coal carts, etc.

Filthy and Unwholesome Houses.

A large number of dirty houses have been discovered in the course of house inspections, and have been cleaned on the receipt of written notice. In seven instances, however, the preliminary notice was disregarded and it was necessary to obtain sanction to issue the statutory notice. This resulted in the work being carried out, thus obviating the necessity for any further proceedings.

Complaints from householders regarding the dampness of walls led to the examination of a number of houses. In many, a quantity of water under the front sitting-room floor was discovered, sometimes several inches deep. All that was required was the provision of a tile drain to remove the sub-soil water. This ought to be done in every instance when the soil is a damp one, as its omission leads to conditions which are exceedingly injurious to health.

Poor Law Relief Statistics.

I am indebted to Mr. C. E. Speakman, Clerk to the poor Law Guardians, for the following information :—

I. Number of in-door poor relieved during half year ended Michaelmas, 1904 :—

Able-bodied	83
Not able-bodied	75
Insane	5
Children	72

TOTAL	<u>235</u>
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Vagrants relieved in Workhouse during same period ... 4601

II. Number of out-door poor relieved in the Borough of Crewe during half year ended Michaelmas, 1904 ... 1001

Vagrants relieved from Lady day to July 1904 ... 660

III. Cost of out-door relief in Borough of Crewe during half year ended Michaelmas ... 1904 £2229 11s. 6d.

TABLE 30.

METEOROLOGY.—Mr. Geo. Latimer, the Curator of the Queen's Park, has kindly furnished the figures for the following table.

1904.	Total Rainfall in inches.	No. of Rainy Days.	PREVAILING WIND IN DAYS.								MEAN TEMPERATURE.			
			N.	S.	E.	W.	N.W.	N.E.	S.W.	S.E.	Max'm in Shade.	Mini'm in Shade.	One foot deep.	Four feet deep.
January ...	7.4	14	...	13	1	3	7	...	3	4	39	31	36	43
February	7.36	16	2	3	8	3	5	...	2	6	41	30	39	42
March	3.26	7	4	8	6	1	3	5	2	2	46	31	39	41
April ...	5.88	18	2	3	1	11	4	...	7	2	53	37	45	44
May ...	2.0	8	...	8	6	7	5	1	2	2	61	40	50	47
June ...	2.0	6	...	3	3	7	5	6	4	2	66	44	56	52
July ...	3.0	9	...	11	3	4	2	5	3	3	74	51	61	56
August ...	5.0	14	3	8	1	12	3	...	3	1	68	46	59	58
September	2.63	9	2	9	3	2	3	1	3	7	64	43	56	56
October ...	1.97	5	1	5	3	7	6	...	6	3	56	39	51	54
November	1.26	7	...	3	3	15	6	...	1	2	43	31	45	50
December	2.2	9	2	10	1	7	4	...	6	1	40	30	41	45
Total ...	43.96	122	16	84	39	79	53	18	42	35	...	...	...	...

As compared with 1903 the year has been much drier, the total rainfall being nearly 10 inches less, while there were 33 more days on which no rain fell. The driest months were May, June, October, November, and December. The mean temperatures for the months were higher from April to August and lower during November and December, when the rainfall fell very greatly below that of the previous year.

LOCAL GOVERNMENT BOARD RETURN.

TABLE 1.—For whole district.

YEAR	Population estimated to Middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.				Total Deaths in Public Institutions in the District.	Deaths of Non Residents registered in Public In- stitutions in the District.	Deaths of Residents registered in Public Insti- tutions beyond the District.	Nett Deaths at all Ages belonging to the District.			
		Number.	* Rate.	Under one Year of Age.		At all Ages.					Number.	Rate.*	Number.	* Rate.
				Number.	Rate per 1,000 Births registered.	Number.	Rate.*							
1	2	3	4	5	6	7	8	9	10	11	12	13		
1894 ...	35,796	1,215	33·9	174	143	520	14·5	...	...	...	‡520	14·5
1895 ...	36,726	1,237	33·6	198	166	608	16·5	4	...	...	‡608	16·5
1896 ...	37,656	1,200	31·8	166	138	568	15·0	9	8	11	571	15·1		
1897 ...	38,586	1,278	33·1	186	146	617	15·9	19	6	16	627	16·2		
1898 ...	39,516	1,365	34·5	232	169	683	17·2	20	9	25	699	17·6		
1899 ...	40,446	1,400	34·6	231	165	667	16·4	16	4	32	625	17·1		
1900 ...	41,376	1,420	34·3	196	138	653	15·7	19	7	31	677	16·3		
1901 ...	42,307	1,311	30·9	234	178	685	16·1	26	2	27	710	16·7		
1902 ...	43,237	1,412	32·6	186	131	613	14·1	24	2	37	648	14·9		
1903 ...	45,505	1,454	31·9	210	145	636	14·3	36	6	21	651	14·3.		
Averages for years 1894-1903	40,115	1,329	33·1	201	151	625	15·5	...	...	...	633	15·9
1904 ...	46,065	1,425	30·9	226	159	659	14·3	20	5	19	673	14·6		

* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

Area of District in acres (exclusive of area covered by water).	} 2185	Total population at all ages, 42,074	} At Census of 1901.
		Number of inhabited houses, 8,771	
		Average number of persons per house, 4·79	

‡ These totals and rates were not adjusted for deaths of non-residents and residents dying outside the Borough, and the data for columns 10 and 11 are not given in the reports for these years.

LOCAL GOVERNMENT BOARD RETURN.

TABLE 2.

NAMES OF LOCALITIES.	1. BOROUGH.				2. CENTRAL WARD.			3. WEST WARD.			4. NORTH WARD.			5. SOUTH WARD.		
	Population esti- mated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Deaths at all ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Deaths at all ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Deaths at all ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Deaths at all ages.	Deaths under 1 year.
1894	35,796	1,215	520	174	7,951	149	45	8,069	130	39	8,649	128	56	11,127	113	34
1895	36,726	1,237	608	198	8,158	174	47	8,276	158	54	8,873	132	53	11,419	144	44
1896	37,656	1,200	568	166	8,365	158	41	8,483	137	41	9,097	154	48	11,711	119	36
1897†	38,586	1,278	627	189	8,572	151	41	8,690	167	55	9,321	159	56	12,003	134	57
1898†	39,516	1,365	699	232	8,779	185	54	8,897	155	49	9,545	163	61	12,295	171	68
1899†	40,446	1,400	695	231	8,986	193	60	9,104	164	57	9,767	155	54	12,587	162	60
1900†	41,376	1,420	677	196	9,193	174	50	9,311	162	52	9,993	152	44	12,879	167	50
1901†	42,307	1,311	710	238	9,400	165	43	9,518	171	65	10,217	168	64	13,172	188	62
1902†	43,237	1,412	648	186	9,607	138	30	9,725	166	48	10,441	157	62	13,464	158	44
1903†	45,565	1,454	651	211	10,111	160	50	10,237	148	52	10,989	128	46	14,168	194	62
Averages of Years 1894 to 1903	40,115	1,329	640	202	8,902	164	46	9,031	155	51	9,689	149	54	12,482	155	51
1904†	46,065	1,425	†673	†228	10,235	120	37	10,363	157	57	11,123	163	61	14,344	209	7

† There were 16 deaths in 1897; 25 in 1898; 21 in 1899; 22 in 1900; 13 in 1901; 29 in 1902; 21 in 1903; and 19 in 1904 of persons temporarily resident outside the Borough whose former addresses could not be ascertained. These, therefore, are not relegated to the wards.

TABLE 3.—Cases of Infectious Diseases Notified during the Year 1904.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.						TOTAL CASES NOTIFIED IN EACH LOCALITY.				NO. OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY			
	At all Ages.	At Ages—Years.					1	2	3	4	Central Ward. (s H)	West Ward. (s H)	North Ward. (H)	South Ward.
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.								
Small-pox ...	...	...	...	...	...	65 and up-wards.	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria ...	49	1	18	26	1	3	4	10	10	25	...	3	5	4
Membranous eroup ...	4	...	2	2	...	...	1	2	1	...	...	...	1	...
Erysipelas ...	52	2	3	6	8	29	8	7	18	19	...	...	...	...
Scarlet fever ...	351	3	107	222	13	6	44	104	85	118	38	95	68	84
Typhus fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric fever ...	2	...	...	1	...	1	1	1	...	...	...	...	...	...
Relapsing fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
†Puerperal fever ...	1	...	...	...	1	...	...	1	...	...	...	...	...	...
Plague ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals ...	459	6	130	257	23	39	58	125	114	162	38	98	74	88

The Isolation Hospital is situate in the North Ward marked (H), and the Small-pox Hospital is situate in the West ward marked (s H).

† One case notified only, but from Registrar's Returns there were three deaths.

LOCAL GOVERNMENT BOARD RETURN.

TABLE 4.—Causes of, and Ages at, Death during year 1904.

CAUSES OF DEATH.	DEATHS IN OR BELONGING TO WHOLE DISTRICT AT SUBJOINED AGES.						DEATHS IN OR BELONGING TO LOCALITIES AT ALL AGES.					Total Deaths in Public Institutions in the District	
	All Ages	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and 65.	65 and upwards.	Central Ward.	West Ward.	North Ward.	South Ward.		Address could not be obtained.
Measles	13	3	10	...	...	...	...	1	2	9	1	...	7
Scarlet Fever	11	...	7	4	...	...	...	1	3	3	4	...	...
Whooping Cough	12	6	6	...	...	...	...	...	3	4	5	...	...
Diphtheria and Membranous Croup	3	...	2	1	...	...	...	...	2	1	...	...	...
Enteric Fever	1	...	...	...	1	...	...	...	1	...	...	...	...
Epidemic Influenza	7	...	...	...	1	3	3	3	...	1	3	...	...
Diarrhoea	34	30	3	...	1	1	...	4	9	9	12	...	...
Enteritis	14	8	1	...	1	4	...	6	1	3	4	...	...
Puerperal Fever	3	...	...	...	...	3	...	...	1	2	...	...	...
Erysipelas	5	1	...	...	2	1	1	1	3	1	...	...	...
Other Septic Diseases ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Phthisis (Pulmonary Tuberculosis)	29	...	...	3	9	17	...	5	6	5	13	...	...
Other Tubercular Diseases	45	22	11	6	3	3	...	3	10	13	18	1	2
Cancer, Malignant Disease	25	...	...	...	...	18	7	5	5	5	9	1	...
Bronchitis	57	17	11	1	...	14	14	13	14	12	19	1	...
Pneumonia	42	7	8	3	2	17	5	5	14	14	8	1	1
Pleurisy	3	...	...	...	...	1	2	1	2	...	...	...	...
Other Diseases of Respiratory Organs	34	13	14	...	1	3	3	4	11	10	9	...	1
Alcoholism	7	...	...	...	...	4	3	3	2	1	1	...	...
Cirrhosis of Liver ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...
Veneral Diseases	2	2	...	...	...	...	...	...	1	1	...	...	...
Premature Birth	26	26	...	...	...	...	...	4	9	2	11	...	...
Diseases and Accidents of Parturition	2	...	...	...	...	2	...	1	...	1	...	...	...
Heart Diseases	50	3	...	2	2	28	18	13	4	4	25	4	2
Accidents	16	3	2	2	1	5	3	3	6	3	3	1	6
Suicides	5	...	...	...	...	4	1	1	1	3	...	...	...
All other Causes	227	87	14	7	4	54	61	43	47	61	66	10	1
All Causes	673	228	89	29	27	179	121	120	157	168	209	19	20

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TABLE 31.—Classification of Deaths in the Borough of Crewe during 1904

TABLE 31.—Classification of Deaths in the Borough of Grove during 1904							
	0-1 Year.	1-5	5-15	15-25	25-45	Over 45	Totals.
							1904 1903
I. SPECIFIC FERRILE OR ZYMOTIC DISEASES.							
1.—Miasmatic Diseases.							
Smallpox... { { Unvaccinated { Vaccinated { No Statement	...	2	...	...	...	...	2
Chickenpox...	...	10	...	...	...	...	13
Measles...	...	7	4	...	...	...	11
Scarlat Fever...	9
Typhus...	...	6	...	...	...	...	17
Whooping Cough...	...	2	1	...	...	...	3
Diphtheria and Membranous Croup...	15
Scarletina and Ill-defined Fever...	...	1	1	...	...	...	1
Enteric or Typhoid Fever...	3	...	4
Influenza...	7
Other Miasmatic Diseases...
2.—Zoonotic Diseases.							
Cholera...	30	3	...	...	1	...	34
Dysentery...
Paratyphoid...
3.—Malarial Diseases.							
Remittent Fever...
Ague...
4.—Zoonotic Diseases.							
Cowpox and effects of Vaccination...
Other Diseases (e.g., Hydrophobia, Glanders, Splenic Fever)	2	...	...	...	...	...	2
5.—Venereal Diseases.							
Syphilis...
Stricture of Urethra...
6.—Scurvy Diseases.							
Erysipelas...	1	...	...	2	...	...	5
Pyæmia, Septicæmia...
Puerperal Fever...
II.—INFECTIOUS DISEASES.							
1.—Zoonotic Diseases.							
Trichinosis and other Parasitic Diseases...
Worms, Hydatids and other Animal Parasitic Diseases...
III.—DIETETIC DISEASES.							
Want of Breast Milk Starvation...
Scurvy...
Chronic Alcoholism...
Delirium Tremens...
IV.—CONSTITUTIONAL DISEASES.							
Rheumatic Fever, Rheumatism of the Heart...
Rheumatoid...
Rickets...
Cancer, Malignant Disease...
Sarcoma...	13	3	...	...	...	...	18
Tubercular Meningitis, Hydrocephalus...
Phthisis...
Other forms of Tuberculosis, Scrophula...
Purpura, Hemorrhagic Diathesis...
Anæmia, Chlorosis, Leucocythæmia...
Other Constitutional Diseases...
V.—DEVELOPMENTAL DISEASES.							
Premature Birth...	26	...	...	...	...	...	26
Atelactasia...	3	1	...	...	...	...	4
Congenital Malformations...
Old Age...
VI.—LOCAL DISEASES.							
1.—Diseases of Nervous System.							
Inflammation of Brain or Membranes...
Apoplexy, Softening of Brain, Hemiplegia, Brain Paralysis...
Insanity, General Paralysis of the Insane...
Epilepsy...	13	2	...	...	...	...	15
Convulsions...
Laryngismus Stridulus (Spasm of Glottis)...
Disease of Spinal Cord, Paraplegia, Paralysis...
Ataxia...	1	1	...	...	...	...	2
2.—Diseases of Organs of SPECIAL SENSE.							
(<i>See</i> of Ear, Eye, Nose)...
3.—Diseases of CIRCULATORY SYSTEM.							
Pericarditis...
Acute Endocarditis...
Valvular Diseases of Heart...
Other Diseases of Heart...
Embolism, Thrombosis...
Other diseases of Blood Vessels...
4.—DISEASES OF RESPIRATORY SYSTEM.							
Laryngitis...
Croup (not spasmodic)...
Whooping Cough, Asthma...
Bronchitis...
Pneumonia...
Broncho-Pneumonia...
Pleurisy...
Other Diseases of Respiratory System...
5.—Diseases of DIGESTIVE SYSTEM.							
Dysentery...
Sore Throat, Quinsy...
Diseases of Stomach...
Enteritis...
Obstructive Diseases of Intestine...
Peritonitis...
Ascites...
Cirrhosis of Liver...
Jaundice and other Diseases of Liver...
Other Diseases of Digestive System...
6.—DISEASES OF LYMPHATIC SYSTEM.							
(<i>See</i> of Lymphatics and of Spleen)...
7.—DISEASES OF GLAND-LIKE ORGANS or OF OTHER GLANDS.							
(<i>See</i> of Endocrine Glands.)
8.—DISEASES OF URINARY SYSTEM.							
Nephritis...
Bright's Disease, Albuminuria...
Disease of Bladder or of Prostate...
Other Diseases of the Urinary System...
9.—DISEASES OF REPRODUCTIVE SYSTEM.							
A.—Of Organs of Generation.							
Male Organs...
Female Organs...
B.—Of Parturition.							
Abortion, Miscarriage...
Puerperal Convulsions...
Placenta Previa, Flooding...
Other Accidents of Child Birth...
10.—DISEASES OF BONES AND JOINTS.							
Gout, Necrosis...
Arthritis, Osteitis, Periostitis...
Other Diseases of Bones and Joints...
11.—DISEASES OF INTEGUMENTARY SYSTEM.							
Carbuncle, Pulegion...
Other Diseases of Integumentary System...
VII.—DEATHS FROM VIOLENCE.							
1.—Accident or Negligence.							
Fracture and Contusions...
Gunshot Wounds...
Cut, Stab...
Burn, Scald...
Poison...
Drowning...
Starvation...
Otherwise...
2.—Homicide.							
Manslaughter...
Murder...
3.—Suicide.							
Gunshot Wounds...
Cut, Stab...
Poison...
Drowning...
Hangings...
Otherwise...
4.—Execution.							
Hangings...
VIII.—DEATHS FROM ILL-DEFINED AND NOT SPECIFIED CAUSES.							
Dropsy...
Debility, Atrophy, Imposition...
Mortification...
Tumour...
Abscess...
Hæmorrhage...
Natural Causes...
Such Death (cause not ascertained)...
Causes not Specified or Ill-defined...
Totals	228	89	29	27	179	121	673
							651

